

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Intercenter validation of a knowledge based model for automated planning of volumetric modulated arc therapy for prostate cancer. The experience of the German RapidPlan Consortium.	C Schubert (University Medical Center Hamburg-Eppendorf, Germany); C Weiss (Klinikum Darmstadt, Germany); O Waletzko (Klinikum Dortmund, Germany); D Voelzke (Strahlentherapie Bonn-Rhein-Sieg, Germany); S Toperim (University Medical Center Hamburg-Eppendorf, Germany); A Roeser (Helios Klinikum, Germany); S Puccini (Strahlentherapie Bonn-Rhein-Sieg, Germany); C Mehrens (Klinikum Dortmund, Germany); JD Kueter (University Medical Center Schleswig-Holstein, Campus Lübeck, Germany); K Hierholz (Klinikum Dortmund, Germany); K Gerull (University Medical Center Schleswig-Holstein, Campus Lübeck, Germany); A Fogliata (Humanitas Clinical and Research Center, Italy); A Block (Klinikum Dortmund, Germany); L Cozzi (Humanitas Clinical and Research Center, Italy)	Session 1	Radiation therapy I – IGRT and ART	V 1	10.09.2017	14:30
Evaluation of the consistency in a clinically implemented plan selection strategy for adaptive radiotherapy in cervix cancer	Martin Buschmann (Medical University of Vienna, Austria; Medical University of Vienna, Austria); Alina Sturdza (Medical University of Vienna, Austria); Katarina Majercakova (Medical University of Vienna, Austria; Medical University of Vienna, Austria); Stephanie Smet (Medical University of Vienna, Austria); Dina Najjari (Medical University of Vienna, Austria); Richard Pötter (Medical University of Vienna, Austria); Dietmar Georg (Medical University of Vienna, Austria; Medical University of Vienna, Austria); Yvette Seppenwoolde (Medical University of Vienna, Austria; Medical University of Vienna, Austria)	Session 1	Radiation therapy I – IGRT and ART	V 2	10.09.2017	14:30
Detection of changes in the patient anatomy using the integrated detector array of a tomotherapy system	Kai Schubert (Universitätsklinikum Heidelberg, Germany); Sebastian Klüter (Universitätsklinikum Heidelberg, Germany); Xenia Wester (Universitätsklinikum Heidelberg, Germany); Dieter Oetzel (Universitätsklinikum Heidelberg, Germany); Jürgen Debus (Universitätsklinikum Heidelberg, Germany)	Session 1	Radiation therapy I – IGRT and ART	V 3	10.09.2017	14:30
Photon fluence reconstruction for online dose verification	Damian Czarnecki (Technische Hochschule Mittelhessen, Germany; Carl von Ossietzky Universität Oldenburg, Germany); Thilo Seliger (Philipps-Universität Marburg, Germany); Rolf Kussaether (MedCom Gesellschaft fuer medizinische Bildverarbeitung mbH, Germany); Ulf Mäder (Technische Hochschule Mittelhessen, Germany); Björn Poppe (Carl von Ossietzky Universität Oldenburg, Germany); Klemens Zink (Technische Hochschule Mittelhessen, Germany; Universitätsklinikum Gießen-Marburg, Germany; Frankfurt Institute for Advanced Studies (FIAS), Germany)	Session 1	Radiation therapy I – IGRT and ART	V 4	10.09.2017	14:30
A tissue-equivalent test environment for malfunctions of active medical implants and electronic devices due to radiation	Manuel Stich (Ostbayerische Technische Hochschule Amberg-Weiden, Germany; University Hospital Würzburg, Germany); Larissa Blümlein (Ostbayerische Technische Hochschule Amberg-Weiden, Germany; Hospital St. Marien Amberg, Germany); Felix Schmidl (Ostbayerische Technische Hochschule Amberg-Weiden, Germany); Anne Slawig (Ostbayerische Technische Hochschule Amberg-Weiden, Germany; University Hospital Würzburg, Germany); Richard Lösch (Hospital St. Marien Amberg, Germany); Matthias Hipp (Hospital St. Marien Amberg, Germany); Zehra Ese (MR:comp GmbH, Germany; University of Duisburg-Essen, Germany); Marcel Kressmann (MR:comp GmbH, Germany); Jakob Kreutner (MR:comp GmbH, Germany); Gregor Schaefer (MR:comp GmbH, Germany); Herbert Köstler (University Hospital Würzburg, Germany); Ralf Ringler (Ostbayerische Technische Hochschule Amberg-Weiden, Germany)	Session 1	Radiation therapy I – IGRT and ART	V 6	10.09.2017	14:30
Surface plasmon resonance measurements of receptor binding kinetics for physiologically-based pharmacokinetic modeling of molecular radiotherapy using PSMA-11	Gordon Winter (Universität Ulm, Germany); Anja Vogt (Universität Ulm, Germany); Nusrat J. Begum (Universität Ulm, Germany); Christoph Solbach (Universität Ulm, Germany); Ambros J. Beer (Universität Ulm, Germany); Gerhard Glatting (Universität Ulm, Germany); Peter Kletting (Universität Ulm, Germany)	Session 2	Cells, materials and biochemistry I	V 7	10.09.2017	14:30
A lab-on-a-chip for purification of miRNAs from archival (FFPE) tissue samples	Gregory Dame (Medizinische Hochschule Brandenburg, Germany); Ole Behrmann (Universität, Germany); Julian Heni (Universität, Germany); Frank Hufert (Medizinische Hochschule Brandenburg, Germany); Gerald Urban (Universität, Germany)	Session 2	Cells, materials and biochemistry I	V 8	10.09.2017	14:30
System for automated cell cultivation and analysis	Mike Stubenrauch (Technische Universität Ilmenau, Germany); Robert Fischer (Technische Universität Ilmenau, Germany); Martin Hoffmann (Technische Universität Ilmenau, Germany); Jens Müller (Technische Universität Ilmenau, Germany); Stefan Sinzinger (Technische Universität Ilmenau, Germany); Klaus Liefeth (Institut für Bioprozess- und Analysenmesstechnik e.V., Germany); Hartmut Witte (Technische Universität Ilmenau, Germany)	Session 2	Cells, materials and biochemistry I	V 9	10.09.2017	14:30

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Cell culture-based <i>in vitro</i> models for investigating the SPION passage through cellular barriers	Christine Gräfe (Universitätsklinikum Jena, Germany); Elena Müller (Universitätsklinikum Jena, Germany); Ioana Slabu (Physikalisch-Technische Bundesanstalt, Germany); Andreas Weidner (Technische Universität Ilmenau, Germany); Frank Wiekhorst (Physikalisch-Technische Bundesanstalt, Germany); Andreas Hochhaus (Universitätsklinikum Jena, Germany); Silvio Dutz (Technische Universität Ilmenau, Germany); Joachim H. Clement (Universitätsklinikum Jena, Germany)	Session 2	Cells, materials and biochemistry I	V 10	10.09.2017	14:30
Non-intrusive performance analysis of implantable electrodes	Max Eickenscheidt (Universität Freiburg, Germany); Jonas Eberhardt (Universität Freiburg, Germany); Thomas Stieglitz (Universität Freiburg, Germany)	Session 2	Cells, materials and biochemistry I	V 11	10.09.2017	14:30
Effective parameters describing mechanisms of magnetic separation using superparamagnetic beads	Uwe Steinhoff (Physikalisch-Technische Bundesanstalt, Germany); Norbert Löwa (Physikalisch-Technische Bundesanstalt, Germany); Frank Wiekhorst (Physikalisch-Technische Bundesanstalt, Germany)	Session 2	Cells, materials and biochemistry I	V 12	10.09.2017	14:30
Operation models of the temporal bone: generation and biomechanical properties - How well can haptic properties of the bones be simulated?	Ulrich Vorwerk (Univ. HNO Klinik Magdeburg, Germany)	Session 3	Middle ear: Modelling, diagnostics, therapy I – Modelling	FS 1	10.09.2017	14:30
Effect of middle ear transfer function on stapes quasi-static stiffness induced by a novel 3-axis force sensor	Christof Rösli (UniversitätsSpital Zürich, Switzerland); Ivo Dobrev (UniversitätsSpital Zürich, Switzerland); Jae Hoon Sim (UniversitätsSpital Zürich, Switzerland); Thomas Linder (Kantonsspital Luzern, Switzerland); Alex Huber (UniversitätsSpital Zürich, Switzerland)	Session 3	Middle ear: Modelling, diagnostics, therapy I – Modelling	FS 3	10.09.2017	14:30
Combined optoacoustic and acoustic tomography system for investigation of fingers	Wolfgang Bost (Fraunhofer IBMT, Germany); Milan Oeri (Fraunhofer IBMT, Germany); Steffen Weber (Fraunhofer IBMT, Germany); Steffen Tretbar (Fraunhofer IBMT, Germany); Marc Fournelle (Fraunhofer IBMT, Germany)	Session 4	Imaging and image processing I – Optics and endoscopy	V 14	10.09.2017	14:30
Computer assisted detection of polyps during colonoscopy – results from an initial technical study	Peter Klare (Klinikum Rechts der Isar, Germany); Christoph Sander (Klinikum Rechts der Isar, Germany); Martin Prinzen (Fraunhofer IIS , Germany); Christian Münzenmayer (Fraunhofer IIS , Germany); Sebastian Nowack (Fraunhofer IIS , Germany); Stefan von Delius (Klinikum Rechts der Isar, Germany); Thomas Wittenberg (Fraunhofer IIS , Germany)	Session 4	Imaging and image processing I – Optics and endoscopy	V 15	10.09.2017	14:30
3D-panoramic images for laparoscopy	Daniel Erpenbeck (Fraunhofer IIS , Germany); Tobias Bergen (Fraunhofer IIS , Germany); Niels Lemke (Schoelly Fiberoptics, Germany); Thomas Wittenberg (Fraunhofer IIS , Germany)	Session 4	Imaging and image processing I – Optics and endoscopy	V 16	10.09.2017	14:30
Impact of new ICRU-90 recommendations on clinical photon and electron reference dosimetry	Klemens Zink (Technische Hochschule Mittelhessen, Germany); Damian Czarnecki (Technische Hochschule Mittelhessen, Germany); Philip von Voigts-Rhetz (Technische Hochschule Mittelhessen, Germany)	Session 5	Dosimetry, radiation protection and radiation biology I	V 17	10.09.2017	16:15
Monte Carlo based investigation of the beam quality correction factor kQ depending on the chamber's level of detail	Tabea Pretzsch (University of Applied Sciences, Germany); Philip von Voigts-Rhetz (University of Applied Sciences, Germany); Damian Czarnecki (University of Applied Sciences, Germany); Klemens Zink (University of Applied Sciences, Germany); University Medical Center Giessen-Marburg, Germany)	Session 5	Dosimetry, radiation protection and radiation biology I	V 18	10.09.2017	16:15
Experimental investigation of the depth-dependent fluence perturbation of parallel-plate chambers in clinical electron beam	Philip von Voigts-Rhetz (Institut für Medizinische Physik und Strahlenschutz, Germany; Universitätsklinikum Gießen-Marburg, Germany); Hilke Vorwerk (Universitätsklinikum Gießen-Marburg, Germany); Klemens Zink (Institut für Medizinische Physik und Strahlenschutz, Germany; Universitätsklinikum Gießen-Marburg, Germany)	Session 5	Dosimetry, radiation protection and radiation biology I	V 19	10.09.2017	16:15
Small-field output factor corrections of gas-filled and solid photon detectors – Derivation from their lateral dose response functions by a convolution technique in comparison with direct measurement	Daniela Poppinga (Universität Oldenburg, Germany); Jutta Meyners (Universität Oldenburg, Germany; Imland Klinik, Germany); Björn Delfs (Universität Oldenburg, Germany); Dietrich Harder (Universität Göttingen, Germany); Björn Poppe (Universität Oldenburg, Germany); Hui Khee Looe (Universität Oldenburg, Germany)	Session 5	Dosimetry, radiation protection and radiation biology I	V 20	10.09.2017	16:15
Abdominal dose from radiology and radiotherapy imaging – CT and CBCT protocols	Yvonne Dzierma (Universitätsklinikum des Saarlandes, Germany); Franziska Ziegenhain (Universitätsklinikum des Saarlandes, Germany); Katharina Bell (Universitätsklinikum des Saarlandes, Germany); Philippe Jagoda (Universitätsklinikum des Saarlandes, Germany); Peter Minko (Universitätsklinikum des Saarlandes, Germany); Arno Buecker (Universitätsklinikum des Saarlandes, Germany); Christian Rübe (Universitätsklinikum des Saarlandes, Germany)	Session 5	Dosimetry, radiation protection and radiation biology I	V 22	10.09.2017	16:15

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Influence of age and gender on 5-min QT variability	Rico Schroeder (Ernst-Abbe-Hochschule Jena, Germany); Sarah Radon (Ernst-Abbe-Hochschule Jena, Germany); Claudia Fischer (Ernst-Abbe-Hochschule Jena, Germany); Mireia Valero (Universitat Politècnica de Catalunya (UPC), Spain); Montserrat Vallverdu (Universitat Politècnica de Catalunya (UPC), Spain); Annette Peters (Helmholtz Zentrum München, Germany); Siegfried Perz (Helmholtz Zentrum München, Germany); Andreas Voss (Ernst-Abbe-Hochschule Jena, Germany)	Session 6	Biosignal processing and monitoring I	V 26	10.09.2017	16:15
Moss-embroidered electrodes for an ECG monitoring shirt	Tim Bolle (Institut für Textiltechnik der RWTH Aachen University (ITA), Germany); Jaime Lopes (IncreaseTime SA, Portugal); Adelino Leite Moreira (University of Porto (Unic), Portugal); Vitor Vieira (Inova DE GmbH, Germany); Thomas Gries (Institut für Textiltechnik der RWTH Aachen University (ITA), Germany); Stefan Jockenhoevel (Institut für Textiltechnik der RWTH Aachen University (ITA), Germany); Akram Idrissi (Institut für Textiltechnik der RWTH Aachen University, Germany)	Session 6	Biosignal processing and monitoring I	V 27	10.09.2017	16:15
Breitbandige Energie-Absorbanz zur Mittelohrdiagnostik	Alexander Mewes (UKSH Kiel, HNO-Klinik, Germany); Matthias Hey (UKSH Kiel, HNO-Klinik, Germany)	Session 7	Middle ear: Modelling, diagnostics, therapy II – Diagnostics	FS 4	10.09.2017	16:15
Impedance measurements for a middle ear screening for newborns and infants.	Tobias Sankowsky-Rothe (Jade Hochschule, Germany); Andreas Becker (Universitätsklinik für Hals-Nasen-Ohren-Heilkunde, Germany); Karsten Plotz (Jade Hochschule, Germany); Universitätsklinik für Hals-Nasen-Ohren-Heilkunde, Germany); Andreas Radeloff (Universitätsklinik für Hals-Nasen-Ohren-Heilkunde, Germany); Rüdiger Schönfeld (Universitätsklinik für Hals-Nasen-Ohren-Heilkunde, Germany); Matthias Blau (Jade Hochschule, Germany)	Session 7	Middle ear: Modelling, diagnostics, therapy II – Diagnostics	FS 5	10.09.2017	16:15
Intra-operative monitoring during tympanoplasty	Hannes Seidler (Technische Universität Dresden, Germany); Marie-Luise Metasch (Technische Universität Dresden, Germany); Matthias Bornitz (Technische Universität Dresden, Germany); Marcus Neudert (Technische Universität Dresden, Germany); Nicoloz Lasurashvili (Technische Universität Dresden, Germany); Thomas Zahnert (Technische Universität Dresden, Germany)	Session 7	Middle ear: Modelling, diagnostics, therapy II – Diagnostics	FS 7	10.09.2017	16:15
Towards standardized surgical robotics interoperability for intraoperative assistance systems	Richard Bieck (Universität Leipzig, Germany); Gero Kraus (Universität Leipzig, Germany); Christoph Georgi (Universität Leipzig, Germany); Thomas Neumuth (Universität Leipzig, Germany)	Session 8	Image guided, robotic and miniaturised systems for intervention and therapy I	V 29	10.09.2017	16:15
Integration of a light weight robot control with an advanced medical image processing platform for optimizing accuracy in medical interventions	Scheherazade Kraß (Universität Bremen, Germany); Sebastian Tauscher (Leibniz-Universität Hannover, Germany); Lüder A. Kahrs (Leibniz-Universität Hannover, Germany); Junichi Tokuda (Brigham and Women's Hospital, United States); Ron Kikinis (Universität Bremen, Germany; Brigham and Women's Hospital, United States; Fraunhofer MeVis, Germany; Harvard Medical School, United States)	Session 8	Image guided, robotic and miniaturised systems for intervention and therapy I	V 30	10.09.2017	16:15
Development of a high precision MEMS tilt sensor for navigation systems in robot-assisted surgery	Benjamin Arnold (Technische Universität Chemnitz, Germany); Daniel Wohlrab (Technische Universität Chemnitz, Germany); Christoph Meinecke (Technische Universität Chemnitz, Germany); Jan Mehner (Technische Universität Chemnitz, Germany)	Session 8	Image guided, robotic and miniaturised systems for intervention and therapy I	V 31	10.09.2017	16:15
Prototype of an automated photobiomodulation treatment device for in vitro wound healing studies	Martín Canziani (Hochschule Furtwangen University, Germany; Universidad de Buenos Aires, Argentina); Jacquelyn Dawn Parente (Hochschule Furtwangen University, Germany); Paola Belloni (Hochschule Furtwangen University, Germany); Knut Möller (Hochschule Furtwangen University, Germany); Sabine Krüger-Ziolek (Hochschule Furtwangen University, Germany)	Session 8	Image guided, robotic and miniaturised systems for intervention and therapy I	V 32	10.09.2017	16:15
Full HD endovideo with 4K panorama overview in laparoscopic optical phantom	Wolfgang Kunert (Universitätsklinik für Allgemeine, Viszeral- und Transplantationschirurgie Tübingen, Germany); Sebastian Halder (TWT GmbH Science & Innovation, Germany); Johannes Reichold (TWT GmbH Science & Innovation, Germany); Andreas Kirschniak (Universitätsklinik für Allgemeine, Viszeral- und Transplantationschirurgie Tübingen, Germany)	Session 8	Image guided, robotic and miniaturised systems for intervention and therapy I	V 33	10.09.2017	16:15
Mixed fields of range-shifted and pristine bragg peaks are safe and improve sparing of collateral OARs in PBS proton therapy	Agnieszka Wilk-Kohlbrecher (Paul Scherrer Institute, Switzerland); Rosalind Perrin (Paul Scherrer Institute, Switzerland); Nanta Fachouri (Paul Scherrer Institute, Switzerland); Vasilis Rompokos (University College Hospital, United Kingdom); Francesca Albertini (Paul Scherrer Institute, Switzerland); David Oxley (Paul Scherrer Institute, Switzerland); Sairos Safai (Paul Scherrer Institute, Switzerland); Damien Charles Weber (Paul Scherrer Institute, Switzerland); Alessandra Bolsi (Paul Scherrer Institute, Switzerland); Tony Lomax (Paul Scherrer Institute, Switzerland)	Session 9	Radiation therapy II – Particle therapy I	V 35	11.09.2017	08:30

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Improving the lateral fall-off for proton pencil beam scanning	Carla Winterhalter (Paul Scherrer Institute, Switzerland); Sairos Safai (Paul Scherrer Institute, Switzerland); David Oxley (Paul Scherrer Institute, Switzerland); Damien Charles Weber (Paul Scherrer Institute, Switzerland); Tony Lomax (Paul Scherrer Institute, Switzerland)	Session 9	Radiation therapy II – Particle therapy I	V 36	11.09.2017	08:30
Investigation on beam width tolerances for proton and carbon ion pencil beam scanning	Benjamin Ackermann (Heidelberg Ion-Beam Therapy Centre (HIT), Germany); Stephan Brons (Heidelberg Ion-Beam Therapy Centre (HIT), Germany); Malte Ellerbrock (Heidelberg Ion-Beam Therapy Centre (HIT), Germany); Oliver Jäkel (Heidelberg Ion-Beam Therapy Centre (HIT), Germany; German Cancer Research Centre, Germany)	Session 9	Radiation therapy II – Particle therapy I	V 37	11.09.2017	08:30
Optimization of a compton camera prototype for particle beam range verification	Silvia Liprandi (Ludwig Maximilians Universitaet Muenchen, Germany); Saad Aldawood (Ludwig Maximilians Universitaet Muenchen, Germany; King Saud University, Saudi Arabia); Tim Binder (Ludwig Maximilians Universitaet Muenchen, Germany); Georgios Dedes (Ludwig Maximilians Universitaet Muenchen, Germany); Michael Mayerhofer (Ludwig Maximilians Universitaet Muenchen, Germany; Universitaet Hamburg, Germany); Akram Mohammadi (National Institute of Radiological Sciences, Japan); Fumihiko Nishikido (National Institute of Radiological Sciences, Japan); Sodai Takyu (National Institute of Radiological Sciences, Japan); Ingrid Valencia-Lozano (Ludwig Maximilians Universitaet Muenchen, Germany); Taiga Yamaya (National Institute of Radiological Sciences, Japan); Katia Parodi (Ludwig Maximilians Universitaet Muenchen, Germany); Peter G. Thirolf (Ludwig Maximilians Universitaet Muenchen, Germany)	Session 9	Radiation therapy II – Particle therapy I	V 38	11.09.2017	08:30
Comparison of prompt gamma emission for helium and proton beams: a Monte Carlo study	Riccardo Dal Bello (DKFZ, Germany; Max Planck Research School, Germany); Joao Seco (DKFZ, Germany; Heidelberg University, Germany)	Session 9	Radiation therapy II – Particle therapy I	V 39	11.09.2017	08:30
Sensor components of a miniaturized implant for haemodynamic controlling	Jens Weidenmüller (Fraunhofer IMS, Duisburg, Germany) Özgü Dogan (Fraunhofer IMS, Duisburg, Germany) Alexander Stanitzki (Fraunhofer IMS, Duisburg, Germany) Mario Baum (Fraunhofer ENAS, Chemnitz, Germany) Dirk Wünsch (Fraunhofer Institut für Elektrische Nanosystem, System Packing, Chemnitz, Deutschland) Maik Wiemer (Fraunhofer Institut für Elektrische Nanosystem, System Packing, Chemnitz, Deutschland) Michael Görtz (Fraunhofer IMS, Duisburg, Germany)	Session 10	Medical measuring techniques I	V 43	11.09.2017	08:30
Flow characterization in a multiplexing infusion system	Saif Abdul-Karim (Fachhochschule Lübeck, Germany; Universität zu Lübeck, Germany); Yanglei Tan (Fachhochschule Lübeck, Germany); Jörg Schroeter (Fachhochschule Lübeck, Germany); Bodo Nestler (Fachhochschule Lübeck, Germany)	Session 10	Medical measuring techniques I	V 44	11.09.2017	08:30
Concept of a small-size and low-cost respirator for one way usage	Henning Jürß (Universität Rostock, Germany); Martin Degner (Universität Rostock, Germany); Hartmut Ewald (Universität Rostock, Germany)	Session 10	Medical measuring techniques I	V 45	11.09.2017	08:30
Digitization-time for a paradigm shift in educating biomedical engineers	Clemens Bulitta (Ostbayerische Technische Hochschule Amberg-Weiden, Germany)	Session 11	Digitisation in basic and further education – What now?	V 48	11.09.2017	08:30
Are "digital natives" unfit for the "digital future"?	Michael Möller (Hochschule für Technik und Wirtschaft, Germany)	Session 11	Digitisation in basic and further education – What now?	V 49	11.09.2017	08:30
Laser Assisted Bioprinting (LAB) without sacrificial metal layer for contamination free assembly of cell cultures	Richard Lensing (Fraunhofer Institute for Laser Technology ILT, Germany); Nadine Nottrodt (Fraunhofer Institute for Laser Technology ILT, Germany); Martin Wehner (Fraunhofer Institute for Laser Technology ILT, Germany); Arnold Gillner (Fraunhofer Institute for Laser Technology ILT, Germany)	Session 12	Cells, materials and biochemistry II	V 51	11.09.2017	08:30
Chitosan hydrogel composite biomaterials for repairing the intervertebral disc tissue	Anayancy Osorio-Madrazo (University of Freiburg, Germany); Peter Fratzl (Max-Planck Institute of Colloids and Interfaces, Germany); Gerald Urban (University of Freiburg, Germany); Laurent David (University of Lyon 1, France)	Session 12	Cells, materials and biochemistry II	V 52	11.09.2017	08:30
Multicellular spheroids: a model for nanoparticle-cell interaction studies	Johanna Demut (Universitätsklinikum Jena, Germany); Christine Gräfe (Universitätsklinikum Jena, Germany); Andreas Hochhaus (Universitätsklinikum Jena, Germany); Joachim Clement (Universitätsklinikum Jena, Germany)	Session 12	Cells, materials and biochemistry II	V 53	11.09.2017	08:30

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Towards a biohybrid lung: long-term stability and gas exchange capacity of endothelial cells seeded on gas permeable PDMS membranes	Sarah Menzel (Institute of Applied Medical Engineering (AME), Germany); Christine Donay (ITA - Institut für Textiltechnik, Germany); Felix Hesselmann (Institute of Applied Medical Engineering (AME), Germany); Suzana Djeljadini (DWI - Leibniz Institute for Interactive Materials, Germany); Stefan Jockenhoevel (Institute of Applied Medical Engineering (AME), Germany; ITA - Institut für Textiltechnik, Germany; Maastricht University, Netherlands); Christian G Cornelissen (Institute of Applied Medical Engineering (AME), Germany; RWTH Aachen University Hospital, Germany)	Session 12	Cells, materials and biochemistry II	V 54	11.09.2017	08:30
Hörrehabilitation durch aktive Implantate im Incudostapedialgelenk	Till Moritz Eßinger (Technische Universität Dresden, Germany)	Session 13	Middle ear: Modelling, diagnostics, therapy III – Therapy	FS 9	11.09.2017	08:30
Comparison of clinically and experimentally determined output level of the MET T2 transducer	Hannes Maier (Medizinische Hochschule Hannover, Germany); Susan Busch (Medizinische Hochschule Hannover, Germany); Bernd Waldmann (Cochlear Ltd, Germany); Thomas Lenarz (Medizinische Hochschule Hannover, Germany); Martin Großhämichen (Medizinische Hochschule Hannover, Germany)	Session 13	Middle ear: Modelling, diagnostics, therapy III – Therapy	FS 10	11.09.2017	08:30
Intraoperative, objective, frequency-specific auditory threshold determination via Vibrant Soundbridge - feasibility study	Oliver Dziemba (Universitätsmedizin Greifswald, Germany); Samuel Blanc (MED-EL Medical Electronics, Austria)	Session 13	Middle ear: Modelling, diagnostics, therapy III – Therapy	FS 11	11.09.2017	08:30
Pulse wave analyses: Which parts of the pulse wave are clinically relevant	Johannes Baulmann (Universitätsklinikum Würzburg, Germany)	Session 14	Blood pressure, vascular stiffness, pulse wave, central blood pressure – a interdisciplinary challenge for cardiovascular risk stratification	FS 12	11.09.2017	08:30
Validation of blood pressure measuring devices – clinical update. The German Hypertension League (Deutsche Hochdruckliga DHL®) Quality Seal Protocol for blood pressure-measuring devices: 15-year experience and results from 105 devices	Siegfried Eckert (Ruhr-Universität Bochum, Germany)	Session 14	Blood pressure, vascular stiffness, pulse wave, central blood pressure – a interdisciplinary challenge for cardiovascular risk stratification	FS 13	11.09.2017	08:30
Non invasive blood pressure monitoring based on photoplethymographic signals	Hans-Georg Ortlepp (CiS Forschungsinstitut für Mikrosensorik GmbH, Germany); Olaf Brodersen (CiS Forschungsinstitut für Mikrosensorik GmbH, Germany); Martin Schädel (CiS Forschungsinstitut für Mikrosensorik GmbH, Germany); Thomas Ortlepp (CiS Forschungsinstitut für Mikrosensorik GmbH, Germany)	Session 14	Blood pressure, vascular stiffness, pulse wave, central blood pressure – a interdisciplinary challenge for cardiovascular risk stratification	FS 14	11.09.2017	08:30
Bioprinting of vascularized bone tissue	Petra Kluger (Fraunhofer IGB c/o Reutlingen University, Germany)	Session 15	Additive manufacturing for biomedical applications	FS 16	11.09.2017	08:30
Alginate di-aldehyde gelatin crosslinked hydrogel (ADA-GEL) for biofabrication approach: Tailoring of tubular structures for blood vessel supply	Florian Ruther (Friedrich-Alexander Universität Erlangen-Nürnberg, Germany); Aldo R. Boccaccini (Friedrich-Alexander Universität Erlangen-Nürnberg, Germany); Thomas Distler (Friedrich-Alexander Universität Erlangen-Nürnberg, Germany); Tobias Zehnder (Friedrich-Alexander Universität Erlangen-Nürnberg, Germany); Rainer Detsch (Friedrich-Alexander Universität Erlangen-Nürnberg, Germany)	Session 15	Additive manufacturing for biomedical applications	FS 17	11.09.2017	08:30
Two-step printability assessment for inks processed with extrusion-based bioprinting	Tomasz Jüngst (Universitätsklinikum Würzburg, Germany); Naomi Paxton (Universitätsklinikum Würzburg, Germany); Thomas Böck (Universitätsklinikum Würzburg, Germany); Willi Smolan (Universitätsklinikum Würzburg, Germany); Jürgen Groll (Universitätsklinikum Würzburg, Germany)	Session 15	Additive manufacturing for biomedical applications	FS 18	11.09.2017	08:30
3D-printed biomimetic in-vitro-tumor-angiogenesis-model	Jan Schöneberg (Universitätsklinikum RWTH Aachen, Germany); Benjamin Theek (Universitätsklinikum RWTH Aachen, Germany); Federica De Lorenzi (Universitätsklinikum RWTH Aachen, Germany); Andreas Blaeser (Universitätsklinikum RWTH Aachen, Germany); Fabian Kießling (Universitätsklinikum RWTH Aachen, Germany); Horst Fischer (Universitätsklinikum RWTH Aachen, Germany)	Session 15	Additive manufacturing for biomedical applications	FS 19	11.09.2017	08:30
Extrusion based 3D printing for biomedical applications: opportunities and limitations	Michael Gelinsky (TU Dresden, Germany)	Session 15	Additive manufacturing for biomedical applications	FS 20	11.09.2017	08:30
Comparison between conventional and suspended radiation protection in interventional radiology	Robin Etzel (Technische Hochschule Mittelhessen, Germany); Alexander M. König (Philipps-Universität Marburg, Germany); Boris Keil (Technische Hochschule Mittelhessen, Germany); Andreas H. Mahnken (Philipps-Universität Marburg, Germany); Martin Fiebich (Technische Hochschule Mittelhessen, Germany)	Session 16	Dosimetry, radiation protection and radiation biology II	V 56	11.09.2017	10:30
Attenuation properties of materials used for X-ray protective aprons	Ludwig Büermann (Physikalisch-Technische Bundesanstalt, Germany)	Session 16	Dosimetry, radiation protection and radiation biology II	V 57	11.09.2017	10:30

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Automated dose control for selective retina therapy using optical coherence tomography - a prove of concept	Daniel Kaufmann (Berner Fachhochschule, Switzerland); Christian Burri (Berner Fachhochschule, Switzerland); Patrik Arnold (Berner Fachhochschule, Switzerland); Volker M. Koch (Berner Fachhochschule, Switzerland); Christoph Meier (Berner Fachhochschule, Switzerland); Boris Povazay (Berner Fachhochschule, Switzerland); Joern Justiz (Berner Fachhochschule, Switzerland)	Session 16	Dosimetry, radiation protection and radiation biology II	V 59	11.09.2017	10:30
Impedance based ultrasound probe tracking system for 3D peripheral vessel imaging	Jens Ziegler (Otto-von-Guericke University Magdeburg, Germany); Johannes Krug (Otto-von-Guericke University Magdeburg, Germany); Ghazanfar Ali (Otto-von-Guericke University Magdeburg, Germany); Julian Sprung (PIUR Imaging, Austria); Robert Bauer (PIUR Imaging, Austria); Frederik Bender (PIUR Imaging, Austria); Michael Friebe (Otto-von-Guericke University Magdeburg, Germany)	Session 17	Image guided, robotic and miniaturised systems for intervention and therapy II	V 60	11.09.2017	10:30
Auditory display for ultrasound scan completion	David Black (University of Bremen, Germany; Jacobs University, Germany; Fraunhofer MEVIS, Germany); Jennifer Nitsch (University of Bremen, Germany; Fraunhofer MEVIS, Germany); Horst Hahn (Jacobs University, Germany; Fraunhofer MEVIS, Germany); Ron Kikinis (University of Bremen, Germany; Fraunhofer MEVIS, Germany; Brigham and Women's Hospital and Harvard Medical School, United States)	Session 17	Image guided, robotic and miniaturised systems for intervention and therapy II	V 61	11.09.2017	10:30
Polymer gel-based isocenter test for a MR-linac-system	Stefan Dorsch (Deutsches Krebsforschungszentrum, Germany); Philipp Mann (Deutsches Krebsforschungszentrum, Germany); Clemens Lang (Deutsches Krebsforschungszentrum, Germany); Armin Runz (Deutsches Krebsforschungszentrum, Germany); Christian Karger (Deutsches Krebsforschungszentrum, Germany)	Session 17	Image guided, robotic and miniaturised systems for intervention and therapy II	V 62	11.09.2017	10:30
A compact source for microbeam radiation therapy and phase contrast imaging	Stefan Bartzsch (Klinikum rechts der Isar, Germany; The Institute of Cancer Research, United Kingdom); Uwe Oelfke (The Institute of Cancer Research, United Kingdom); Jan Wilkens (Klinikum rechts der Isar, Germany)	Session 17	Image guided, robotic and miniaturised systems for intervention and therapy II	V 63	11.09.2017	10:30
Concept of an implant with an integrated sensor actuator system for the monitoring and influencing of the mechanical implant bone interface	Holger Lausch (Fraunhofer-Institut für Werkzeugmaschinen und Umformtechnik IWU, Germany); Thomas Töppel (Fraunhofer-Institut für Werkzeugmaschinen und Umformtechnik IWU, Germany); Eric Hensel (Fraunhofer-Institut für Werkzeugmaschinen und Umformtechnik IWU, Germany); Michael Brand (Fraunhofer-Institut für Werkzeugmaschinen und Umformtechnik IWU, Germany); Katarina Gille (Fraunhofer-Institut für Werkzeugmaschinen und Umformtechnik IWU, Germany); Christian Rotsch (Fraunhofer-Institut für Werkzeugmaschinen und Umformtechnik IWU, Germany)	Session 18	Organ and patient support systems I	V 65	11.09.2017	10:30
Monitoring of the inner ear function during and after cochlear implant insertion using cochlear microphonics	Sabine Haumann (Dept. of Otolaryngology, Hannover Medical School, Germany; Cluster of Excellence "Hearing4all" (EXC 1077/1), Germany); Andreas Büchner (Dept. of Otolaryngology, Hannover Medical School, Germany; Cluster of Excellence "Hearing4all" (EXC 1077/1), Germany); Hannes Maier (Dept. of Otolaryngology, Hannover Medical School, Germany; Cluster of Excellence "Hearing4all" (EXC 1077/1), Germany); Thomas Lenarz (Dept. of Otolaryngology, Hannover Medical School, Germany; Cluster of Excellence "Hearing4all" (EXC 1077/1), Germany)	Session 18	Organ and patient support systems I	V 66	11.09.2017	10:30
A method for lower back motion assessment using wearable 6D inertial sensors	Marco Molnar (TU Berlin, Germany); Tilman Engel (Universität Potsdam, Germany); Hannes Kaplick (Universität Potsdam, Germany); Frank Mayer (Universität Potsdam, Germany); Thomas Seel (TU Berlin, Germany)	Session 18	Organ and patient support systems I	V 70	11.09.2017	10:30
Plasma electrolyte concentrations in patients with chronic kidney disease influence cardiac pacemaking in a computational model	Yannick Lutz (Karlsruher Institute of Technology (KIT), Germany); Alan Fabbri (University of Bologna, Italy); Stefano Severi (University of Bologna, Italy); Olaf Dössel (Karlsruher Institute of Technology (KIT), Germany); Axel Loewe (Karlsruher Institute of Technology (KIT), Germany)	Session 19	Modelling and simulation I	V 71	11.09.2017	10:30
Optimal ECG lead systems to maximize left atrial information content	Axel Loewe (Karlsruhe Institute of Technology (KIT), Germany); Sebastian Debatin (Karlsruhe Institute of Technology (KIT), Germany); Gustavo Lenis (Karlsruhe Institute of Technology (KIT), Germany); Olaf Dössel (Karlsruhe Institute of Technology (KIT), Germany)	Session 19	Modelling and simulation I	V 73	11.09.2017	10:30
Developing and coupling a lumped element model of the closed loop human vascular system to a model of cardiac mechanics	Steffen Schuler (Karlsruhe Institute of Technology (KIT), Germany); Lukas Baron (Karlsruhe Institute of Technology (KIT), Germany); Axel Loewe (Karlsruhe Institute of Technology (KIT), Germany); Olaf Dössel (Karlsruhe Institute of Technology (KIT), Germany)	Session 19	Modelling and simulation I	V 74	11.09.2017	10:30
From clinics to the virtual beating heart: a general modeling workflow for patient-specific electromechanical heart simulations	Lukas Baron (Karlsruhe Institute of Technology (KIT), Germany); Axel Loewe (Karlsruhe Institute of Technology (KIT), Germany); Olaf Dössel (Karlsruhe Institute of Technology (KIT), Germany)	Session 19	Modelling and simulation I	V 75	11.09.2017	10:30

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Measurement of moisture at skin surface based on hyperspectral technology	Marianne Maktabi (Diaspective Vision GmbH, Germany); Claire Chalopin (Diaspective Vision GmbH, Germany); Philip Wahl (Diaspective Vision GmbH, Germany); Thomas Neumuth (Diaspective Vision GmbH, Germany)	Session 20	Hyperspectral imaging and optical techniques in medicine	FS 21	11.09.2017	10:30
Workflow for intraoperative hyperspectral imaging in neurosurgery	Richard Mühle (Technische Universität Dresden, Germany); Martin Oelschlägel (Technische Universität Dresden, Germany); Stephan B. Sobottka (Universitätsklinikum Carl Gustav Carus Dresden, Germany); Matthias Kirsch (Universitätsklinikum Carl Gustav Carus Dresden, Germany); Gabriele Schackert (Universitätsklinikum Carl Gustav Carus Dresden, Germany); Ute Morgenstern (Technische Universität Dresden, Germany)	Session 20	Hyperspectral imaging and optical techniques in medicine	FS 22	11.09.2017	10:30
Monitoring hemodynamics and oxygenation in the renal cortex of rats by a combined near-infrared spectroscopy and invasive probe approach	Dirk Grosenick (Physikalisch-Technische Bundesanstalt (PTB), Germany); Thomas Gladysz (Physikalisch-Technische Bundesanstalt (PTB), Germany); Heidrun Wabnitz (Physikalisch-Technische Bundesanstalt (PTB), Germany); Rainer Macdonald (Physikalisch-Technische Bundesanstalt (PTB), Germany); Andreas Pohlmann (Max-Delbrück-Centrum für Molekulare Medizin, Germany); Thoralf Niendorf (Max-Delbrück-Centrum für Molekulare Medizin, Germany); Kathleen Cantow (Charité Universitätsmedizin, Germany); Bert Flemming (Charité Universitätsmedizin, Germany); Erdmann Seeliger (Charité Universitätsmedizin, Germany)	Session 20	Hyperspectral imaging and optical techniques in medicine	FS 25	11.09.2017	10:30
Requirements for a fully-digital surgical microscope regarding the state of the art of surgical microscopes and the surgeon's visual perception	Andreas Wachter (Karlsruher Institute of Technologie (KIT), Germany); Werner Nahm (Karlsruher Institute of Technologie (KIT), Germany)	Session 20	Hyperspectral imaging and optical techniques in medicine	FS 27	11.09.2017	10:30
Experiences and Practice with the interactive telemedical assistance system COMES®	Petra Friedrich (Hochschule Kempten , Germany); Bernhard Wolf (Steinbeis-Transferzentrum Medizinische Elektronik und Lab on Chip-Systeme , Germany)	Session 21	Ambient Medicine®	FS 28	11.09.2017	10:30
Telematic rehabilitation in neurology	Kai-Uwe Hinderer (medica Medizintechnik GmbH, Germany); Martin Knauer (Hochschule Kempten , Germany); Petra Friedrich (Hochschule Kempten , Germany); Bernhard Wolf (Steinbeis-Transferzentrum Medizinische Elektronik und Lab on Chip-Systeme , Germany)	Session 21	Ambient Medicine®	FS 30	11.09.2017	10:30
Auditory-induced cortical activation patterns measured by functional near infrared spectroscopy (fNIRS)	Günther Bauernfeind (Hannover Medical School, Germany; Exzellenzcluster "Hearing4all" (EXC 1077/1), Germany); Selina C. Wriessnegger (Graz University of Technology, Austria); Sabine Haumann (Hannover Medical School, Germany; Exzellenzcluster "Hearing4all" (EXC 1077/1), Germany); Thomas Lenarz (Hannover Medical School, Germany; Exzellenzcluster "Hearing4all" (EXC 1077/1), Germany)	Session 22	Imaging in Hearing	FS 35	11.09.2017	10:30
Development of long-term stable measurement phantoms for quantitative magnetic particle imaging	Lucas Wöckel (Technische Universität Ilmenau, Germany); Volker C. Behr (University of Würzburg, Germany); Cordula Grüttner (micromod Partikeltechnologie GmbH, Germany); Olaf Kosch (Physikalisch-Technische Bundesanstalt Berlin, Germany); Anne Mattern (Technische Universität Ilmenau, Germany); Patrick Vogel (University of Würzburg, Germany; University Hospital Würzburg, Germany); James Wells (Physikalisch-Technische Bundesanstalt Berlin, Germany); Frank Wiekhorst (Physikalisch-Technische Bundesanstalt Berlin, Germany); Silvio Dutz (Technische Universität Ilmenau, Germany)	Poster session 1	Imaging and image processing I	P 1	11.09.2017	15:15
Spin echo based cardiac diffusion imaging sequences at 7T: performance and feasibility ex vivo	David Lohr (University Hospital Wuerzburg, Comprehensive Heart Failure Center, Germany); Maxim Terekhov (University Hospital Wuerzburg, Comprehensive Heart Failure Center, Germany); Andreas Max Weng (University Hospital Wuerzburg, Germany); Anja Schröder (University Hospital Wuerzburg, Germany; Wuerzburg branch of the Fraunhofer IGB, Germany); Heike Walles (University Hospital Wuerzburg, Germany; Wuerzburg branch of the Fraunhofer IGB, Germany); Laura Maria Schreiber (University Hospital Wuerzburg, Comprehensive Heart Failure Center, Germany)	Poster session 1	Imaging and image processing I	P 2	11.09.2017	15:15
Dose splitting using a dual-source computed tomography	Babak Alikhani (Medizinische Hochschule Hannover, Germany); Hans-Jürgen Raatschen (Medizinische Hochschule Hannover, Germany); Thomas Werncke (Medizinische Hochschule Hannover, Germany)	Poster session 1	Imaging and image processing I	P 3	11.09.2017	15:15
Metabolite diffusion measured by MR spectroscopy without water suppression reveals microstructural information in human gray matter	André Döring (Depts. Radiology and Clinical Research, University Bern, Bern, Switzerland, Switzerland); Victor Adalid Lopez (Depts. Radiology and Clinical Research, University Bern, Bern, Switzerland, Switzerland); Roland Kreis (Depts. Radiology and Clinical Research, University Bern, Bern, Switzerland, Switzerland)	Poster session 1	Imaging and image processing I	P 4	11.09.2017	15:15

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Ultrasound thyroid texture classification using a simple texture pattern characterization	Prabal Poudel (Otto-von-Guericke University Magdeburg, Germany); Alfredo Illanes (Otto-von-Guericke University Magdeburg, Germany); Michael Friebe (Otto-von-Guericke University Magdeburg, Germany)	Poster session 1	Imaging and image processing I	P 5	11.09.2017	15:15
Using a segmented multi-echo EPI sequence with simultaneous multislice acquisition for dynamic contrast-enhanced MRI	Finya Reichardt (Strahlenklinik, Medizinische Physik, Universitätsklinikum Essen, Germany); Klaus Eickel (Fraunhofer MEVIS Institute for Medical Image Computing, Germany); Anika Söhner (Strahlenklinik, Medizinische Physik, Universitätsklinikum Essen, Germany); David Andrew Porter (Fraunhofer MEVIS Institute for Medical Image Computing, Germany); Marc Maaß (Evangelisches Krankenhaus Wesel, Germany); Matthias Günther (Fraunhofer MEVIS Institute for Medical Image Computing, Germany); Lutz Lüdemann (Strahlenklinik, Medizinische Physik, Universitätsklinikum Essen, Germany)	Poster session 1	Imaging and image processing I	P 7	11.09.2017	15:15
Determination of the volume of microchannels in bone phantoms by magnetic resonance imaging (MRI) and micro computed tomography (μ CT)	Christian Seiler (Tierärztliche Hochschule Hannover, Germany); Matthias Lüpke (Tierärztliche Hochschule Hannover, Germany); Frank Goblet (Tierärztliche Hochschule Hannover, Germany); Jan-Peter Bach (Tierärztliche Hochschule Hannover, Germany); Hermann Seifert (Tierärztliche Hochschule Hannover, Germany)	Poster session 1	Imaging and image processing I	P 10	11.09.2017	15:15
B0-mapping and shimming efficiency for ex vivo MR imaging of the heart at ultra-high field: validation of standard shimming protocols of magnetom terra 7T scanner	Michael Hock (University Hospital Wuerzburg, Comprehensive Heart Failure Center, Germany); Maxim Terekhov (University Hospital Wuerzburg, Comprehensive Heart Failure Center, Germany); David Lohr (University Hospital Wuerzburg, Comprehensive Heart Failure Center, Germany); Laura Maria Schreiber (University Hospital Wuerzburg, Comprehensive Heart Failure Center, Germany)	Poster session 1	Imaging and image processing I	P 11	11.09.2017	15:15
Parameter optimization for simulation-based artefact correction in computed tomography	Steffen Melnik (Fraunhofer Institute for Production Systems and Design Technology, Germany); Eckart Uhlmann (Fraunhofer Institute for Production Systems and Design Technology, Germany)	Poster session 1	Imaging and image processing I	P 12	11.09.2017	15:15
Simulation model for resolution and contrast analysis of microscopic images based on optical coherence contrast method	Yilun Su (Karlsruhe Institute of Technology (KIT), Germany)	Poster session 2	Imaging and image processing II	P 13	11.09.2017	15:15
Algorithm development for simulation and experimental validation of ultrafast doppler imaging	Stephen Tai (Fraunhofer IBMT, Germany); Holger Hewener (Fraunhofer IBMT, Germany); Marc Fournelle (Fraunhofer IBMT, Germany)	Poster session 2	Imaging and image processing II	P 15	11.09.2017	15:15

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Establishment of a small animal setup for multimodal imaging and irradiation	Christian Neubert (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden; Helmholtz-Zentrum Dresden - Rossendorf, Germany; Brandenburg University of Technology Cottbus - Senftenberg, Germany); Johannes Müller (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden; Helmholtz-Zentrum Dresden - Rossendorf, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Institute of Radiooncology – OncoRay, Germany); Rebecca Bütof (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden; Helmholtz-Zentrum Dresden - Rossendorf, Germany; National Center for Tumor Diseases (NCT), partner site Dresden, Germany; Department of Radiotherapy and Radiation Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Germany); Armin Lühr (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden; Helmholtz-Zentrum Dresden - Rossendorf, Germany; German Cancer Consortium (DKTK), partner site Dresden, and German Cancer Research Center (DKFZ), Germany; Helmholtz-Zentrum Dresden - Rossendorf, Institute of Radiooncology – OncoRay, Germany); Cläre von Neubeck (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden; Helmholtz-Zentrum Dresden - Rossendorf, Germany; German Cancer Consortium (DKTK), partner site Dresden, and German Cancer Research Center (DKFZ), Germany); Michael Schürer (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden; Helmholtz-Zentrum Dresden - Rossendorf, Germany; National Center for Tumor Diseases (NCT), partner site Dresden, Germany); Elke Beyreuther (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden; Helmholtz-Zentrum Dresden - Rossendorf, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Institute of Radiooncology – OncoRay, Germany); Falk Tillner (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden; Helmholtz-Zentrum Dresden - Rossendorf, Germany)	Poster session 2	Imaging and image processing II	P 18	11.09.2017	15:15
Extending cell simulation for fluorescence microscopy bacteria movies	Veit Wiesmann (Fraunhofer-Institut für Integrierte Schaltungen IIS, Germany); Matthias Bergler (Fraunhofer-Institut für Integrierte Schaltungen IIS, Germany); Christian Münzenmayer (Fraunhofer-Institut für Integrierte Schaltungen IIS, Germany); Thomas Wittenberg (Fraunhofer-Institut für Integrierte Schaltungen IIS, Germany)	Poster session 2	Imaging and image processing II	P 19	11.09.2017	15:15
Light path analysis in hyperspectral imaging setups for wound diagnostics using Monte-Carlo-simulation	Bert Henrik Herrmann (Hochschule Wismar, Germany); Christoph Hornberger (Hochschule Wismar, Germany)	Poster session 2	Imaging and image processing II	P 20	11.09.2017	15:15
MRI investigation of biodegradable implants with incorporated magnetic nanoparticles	Benedikt Mues (RWTH Aachen, Germany); Thomas Schmitz-Rode (RWTH Aachen, Germany); Ioana Slabu (RWTH Aachen, Germany)	Poster session 2	Imaging and image processing II	P 21	11.09.2017	15:15
Uptake heterogeneity quantification in lung cancer: impact on image features variability of 3D- and 4D-PET/CT protocols.	Montserrat Carles (Universitätsklinikum Freiburg, Germany); Thomas Bach (Universitätsklinikum Freiburg, Germany); Irene Torres-Espallardo (Hospital Universitario y Politecnico La Fe Valencia, Spain); Dimos Baltas (Universitätsklinikum Freiburg, Germany); Ursula Nestle (Universitätsklinikum Freiburg, Germany); Luis Marti-Bonmati (Hospital Universitario y Politecnico La Fe Valencia, Spain)	Poster session 2	Imaging and image processing II	P 22	11.09.2017	15:15
3D-ultrasound-angiography – a new technique for diagnosis of vascular liver diseases	Valentin Blank (Uniklinikum Leipzig AöR, Germany); Volker Keim (Uniklinikum Leipzig AöR, Germany); Johann Pelz (Uniklinikum Leipzig AöR, Germany); Thomas Karlas (Uniklinikum Leipzig AöR, Germany)	Poster session 3	Imaging and image processing III	P 24	11.09.2017	15:15
Magnetic manipulation in combination with preclinical magnetic particle imaging	Anna Bakenecker (Universität zu Lübeck, Germany); Thomas Friedrich (Universität zu Lübeck, Germany); Anselm von Gladiss (Universität zu Lübeck, Germany); Thorsten M. Buzug (Universität zu Lübeck, Germany)	Poster session 3	Imaging and image processing III	P 25	11.09.2017	15:15

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Remote sensing of vital signs in neonatology – a multispectral, camera-based approach	Michael Paul (RWTH Aachen University, Germany); Christoph Weiss (RWTH Aachen University, Germany); Sabrina Caprice Behr (RWTH Aachen University Hospital, Germany); Boudewijn Venema (RWTH Aachen University, Germany); Konrad Heimann (RWTH Aachen University Hospital, Germany); Jens Mühlsteff (Philips Research, Netherlands); Thorsten Orlikowsky (RWTH Aachen University Hospital, Germany); Steffen Leonhardt (RWTH Aachen University, Germany)	Poster session 3	Imaging and image processing III	P 26	11.09.2017	15:15
Hyperspectral imaging – preoperative analysis of kidneys during normothermic extracorporeal machine perfusion	Wenke Markgraf (Technische Universität Dresden, Germany); Philipp Feistel (Technische Universität Dresden, Germany); Jannis Lilienthal (Technische Universität Dresden, Germany); Christine Thiele (Technische Universität Dresden, Germany); Hagen Malberg (Technische Universität Dresden, Germany)	Poster session 3	Imaging and image processing III	P 28	11.09.2017	15:15
Influence of orthogonal receive channels on the spatial resolution in magnetic particle imaging	Anselm von Gladiss (University of Luebeck, Germany); Matthias Graeser (University Medical Center Hamburg-Eppendorf, Germany); Thorsten M. Buzug (University of Luebeck, Germany)	Poster session 3	Imaging and image processing III	P 29	11.09.2017	15:15
Real-time functional magnetic resonance imaging neurofeedback as a neuroscientific tool	Michael Marxen (Technische Universität Dresden, Germany); Dirk K. Müller (Technische Universität Dresden, Germany); Philipp Riedel (Technische Universität Dresden, Germany); Michael N. Smolka (Technische Universität Dresden, Germany)	Poster session 3	Imaging and image processing III	P 30	11.09.2017	15:15
Image to phantom registration for CT dose calculation using the software tool GMCTdospp	Dennis Sauerwald (Technische Hochschule Mittelhessen, Germany); Ulf Mäder (Technische Hochschule Mittelhessen, Germany); Martin Fiebich (Technische Hochschule Mittelhessen, Germany)	Poster session 3	Imaging and image processing III	P 31	11.09.2017	15:15
Temperature measurement during focused ultrasound treatment with diagnostic ultrasound	Tina Fuhrmann (Hochschule Merseburg, Germany); Klaus-V. Jenderka (Hochschule Merseburg, Germany)	Poster session 3	Imaging and image processing III	P 32	11.09.2017	15:15
An investigation of the modeling error of linearization for EIT reconstruction	Bo Gong (Hochschule Furtwangen, Germany); Benjamin Schullcke (Hochschule Furtwangen, Germany); Sabine Krüger-Ziolek (Hochschule Furtwangen, Germany); Knut Möller (Hochschule Furtwangen, Germany)	Poster session 3	Imaging and image processing III	P 34	11.09.2017	15:15
Force sensitive robotics for automated ultrasonic diagnostics and therapy	Sven Böttger (Universität zu Lübeck, Germany); Svenja Ipsen (Universität zu Lübeck, Germany); Mohammed Al-Badri (Universität zu Lübeck, Germany); Floris Ernst (Universität zu Lübeck, Germany); Achim Schweikard (Universität zu Lübeck, Germany)	Poster session 4	Image guided, robotic and miniaturised systems for intervention and therapy I	P 35	11.09.2017	15:15
Dual mode microwave ablation applicator with power efficient heating capabilities	Carolin Reimann (TU Darmstadt, Germany); Margarita Puentes (TU Darmstadt, Germany); Martin Schüßler (TU Darmstadt, Germany); Thomas J. Vogl (Johann Wolfgang Goethe Universität Frankfurt, Germany); Rolf Jakob (TU Darmstadt, Germany)	Poster session 4	Image guided, robotic and miniaturised systems for intervention and therapy I	P 36	11.09.2017	15:15
Technical approaches to avoid air bubbles for improved patient safety during TURB	Jincy Mariam John (Otto-von-Guericke-Universität Magdeburg, Germany); Holger Fritzsche (Otto-von-Guericke-Universität Magdeburg, Germany); Axel Boese (Otto-von-Guericke-Universität Magdeburg, Germany); Michael Friebe (Otto-von-Guericke-Universität Magdeburg, Germany)	Poster session 4	Image guided, robotic and miniaturised systems for intervention and therapy I	P 37	11.09.2017	15:15
Flexible and low-cost instrument holding concept for interventional MRI	Juan Sebastián Sánchez López (Otto-von-Guericke University Magdeburg, Germany); Robert Odenbach (Otto-von-Guericke University Magdeburg, Germany); Michael Friebe (Otto-von-Guericke University Magdeburg, Germany)	Poster session 4	Image guided, robotic and miniaturised systems for intervention and therapy I	P 38	11.09.2017	15:15
Objective measurement of instrument-tissue interaction in laparoscopic surgery	Patrick Haas (Universitätsklinikum Tübingen, Germany); Wolfgang Kunert (Universitätsklinikum Tübingen, Germany); Jonas Johannink (Universitätsklinikum Tübingen, Germany); Andreas Kirschniak (Universitätsklinikum Tübingen, Germany)	Poster session 4	Image guided, robotic and miniaturised systems for intervention and therapy I	P 41	11.09.2017	15:15
Real time MRI/US fusion using inside-out tracking for interventional procedures and guidance	sathish balakrishnan (INKA - Intelligente Katheter, Germany); Alfredo Illanes (INKA - Intelligente Katheter, Germany); Prabal Poudel (INKA - Intelligente Katheter, Germany); Yesashwini Nagaraj (INKA - Intelligente Katheter, Germany); Bjoern Menze (INKA - Intelligente Katheter, Germany); Michael Friebe (INKA - Intelligente Katheter, Germany)	Poster session 4	Image guided, robotic and miniaturised systems for intervention and therapy I	P 42	11.09.2017	15:15
A miniaturized sensor for needle tip force measurements	Christian Hatzfeld (Technische Universität Darmstadt, Germany); Sonja Wismath (Technische Universität Darmstadt, Germany); Markus Hessinger (Technische Universität Darmstadt, Germany); Roland Werthschützky (Technische Universität Darmstadt, Germany); Alexander Schlaefer (Technische Universität Hamburg-Harburg, Germany); Mario Kupnik (Technische Universität Darmstadt, Germany)	Poster session 5	Image guided, robotic and miniaturised systems for intervention and therapy II	P 43	11.09.2017	15:15
Determination of needle orientation angles from artifact geometry in simulated magnetic resonance images	Heinrich Martin Overhoff (Westfälische Hochschule, Germany)	Poster session 5	Image guided, robotic and miniaturised systems for intervention and therapy II	P 45	11.09.2017	15:15

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Examination of the correlation between external patient movement and the corresponding movement of implanted gold markers in the liver	Marc Ziegler (Universitätsklinikum Erlangen, Germany); Sebastian Lettmaier (Universitätsklinikum Erlangen, Germany); Rainer Fietkau (Universitätsklinikum Erlangen, Germany); Christoph Bert (Universitätsklinikum Erlangen, Germany)	Poster session 5	Image guided, robotic and miniaturised systems for intervention and therapy II	P 46	11.09.2017	15:15
Wizard-guided fibula transplant registration for navigation-assisted mandibular reconstruction in craniomaxillofacial tumor surgery	Sebastian Kallus (University of Heidelberg, Germany); Moritz Berger (University Hospital Heidelberg, Germany); Urs Eisenmann (University of Heidelberg, Germany); Igor Nova (University of Heidelberg, Germany); Kolja Freier (University Hospital Heidelberg, Germany); Hartmut Dickhaus (University of Heidelberg, Germany)	Poster session 5	Image guided, robotic and miniaturised systems for intervention and therapy II	P 47	11.09.2017	15:15
Minimal-invasive image guided treatment of spine metastasis in late cancer disease with thermoablation: now and then	Mathias Becker (Otto von Guericke Universität Magdeburg, Germany); Steffen Serowy (Otto von Guericke Universität Magdeburg, Germany); Jörg Franke (Klinikum Magdeburg, Germany); Magnus Hanses (Fraunhofer-Institut für Fabrikbetrieb und -automatisierung IFF, Germany); Simon Adler (Fraunhofer-Institut für Fabrikbetrieb und -automatisierung IFF, Germany); Martin Skalej (Otto von Guericke Universität Magdeburg, Germany)	Poster session 5	Image guided, robotic and miniaturised systems for intervention and therapy II	P 48	11.09.2017	15:15
Electrospray based delivery of therapeutic active substances in vitro and in vivo	Paulius Ruzgys (University Hospital Bern, Switzerland; University of Bern, Switzerland; Vytautas Magnus University, Lithuania); Stephan Boehringer (University of Applied Sciences and Arts Northwestern Switzerland, Switzerland); Saulius Šatkauskas (Vytautas Magnus University, Lithuania); Thomas Geiser (University Hospital Bern, Switzerland; University of Bern, Switzerland); Amiq Gazdhar (University Hospital Bern, Switzerland; University of Bern, Switzerland); David Hradetzky (University of Applied Sciences and Arts Northwestern Switzerland, Switzerland)	Poster session 5	Image guided, robotic and miniaturised systems for intervention and therapy II	P 49	11.09.2017	15:15
SMARTSCOPE - portable, easy to use and cheap smartphone endoscopic system	Axel Boese (Otto-von-Guericke Universität Magdeburg, Germany); Michael Friebe (Otto-von-Guericke Universität Magdeburg, Germany)	Poster session 5	Image guided, robotic and miniaturised systems for intervention and therapy II	P 50	11.09.2017	15:15
A factor graph-based change point detection with an application to sEMG-Onset and activity detection	Christian Hoffmann (Institut für Medizinische Elektrotechnik, Universität zu Lübeck, Germany); Eike Petersen (Institut für Medizinische Elektrotechnik, Universität zu Lübeck, Germany); Thomas Handzuj (Institut für Medizinische Elektrotechnik, Universität zu Lübeck, Germany); Giacomo Bellani (Institut für Medizinische Elektrotechnik, Universität zu Lübeck, Germany); Philipp Rostalski (Institut für Medizinische Elektrotechnik, Universität zu Lübeck, Germany)	Poster session 6	Biosignal processing and monitoring I	P 51	11.09.2017	15:15
Experimental workflow for determining psychological stress from physiological biosignals	Alexander Pilling (OTH Regensburg, Germany); Franz Suess (OTH and University Regensburg, Germany); Simone Kubowitsch (OTH Regensburg, Germany; University Regensburg, Germany); Sebastian Dendorfer (OTH Regensburg, Germany; OTH and University Regensburg, Germany)	Poster session 6	Biosignal processing and monitoring I	P 53	11.09.2017	15:15
Monitoring of drilling induced noise during ear surgeries	Matthias Bornitz (TU Dresden, Germany); Mario Fleischer (TU Dresden, Germany); Thomas Zahnert (TU Dresden, Germany)	Poster session 6	Biosignal processing and monitoring I	P 54	11.09.2017	15:15
Performance evaluation of state-of-the-art neural recorder SoCs	Michael Haas (Universität Ulm, Germany); Mahdi Rajabzadeh (Universität Ulm, Germany); Maurits Ortmanns (Universität Ulm, Germany)	Poster session 6	Biosignal processing and monitoring I	P 57	11.09.2017	15:15
Statistical assessment of cardiac excitation by morphology-based clustering of local activation waves	Tobias Oesterlein (Karlsruhe Institute of Technology (KIT), Germany); Axel Loewe (Karlsruhe Institute of Technology (KIT), Germany); Gustavo Lenis (Karlsruhe Institute of Technology (KIT), Germany); Olaf Dössel (Karlsruhe Institute of Technology (KIT), Germany)	Poster session 6	Biosignal processing and monitoring I	P 59	11.09.2017	15:15
Automatic crackle detection in children with pneumonia	Julian Langer (Technische Hochschule Mittelhessen, Germany); Keywan Sohrabi (Technische Hochschule Mittelhessen, Germany); Wilfried Nikolaizik (Universitätsklinikum Gießen Marburg, Germany); Patrick Stein (Technische Hochschule Mittelhessen, Germany); Marcel Geis (Technische Hochschule Mittelhessen, Germany); Andreas Weissflog (Thora Tech GmbH, Germany); Volker Gross (Technische Hochschule Mittelhessen, Germany)	Poster session 7	Biosignal processing and monitoring II	P 62	11.09.2017	15:15
A feasibility study to record human knee sounds	Olaf Nalik (Technische Hochschule Mittelhessen, Germany); Volker Gross (Technische Hochschule Mittelhessen, Germany); Lukas Huber (Technische Hochschule Mittelhessen, Germany); Patrick Fischer (Technische Hochschule Mittelhessen, Germany); Tibor Jung (Technische Hochschule Mittelhessen, Germany); Andreas Weissflog (Thora Tech GmbH, Germany); Keywan Sohrabi (Technische Hochschule Mittelhessen, Germany)	Poster session 7	Biosignal processing and monitoring II	P 63	11.09.2017	15:15
Major arterial cardiovascular simulator (MACSim) for variational parameter studies in patient-specific vascular geometries	Stefan Bernhard (Hochschule Pforzheim, Germany); Stefan Krickl (Hochschule Pforzheim, Germany)	Poster session 7	Biosignal processing and monitoring II	P 64	11.09.2017	15:15

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Respiratory influence on HRV parameters analyzed during controlled respiration, spontaneous respiration and apnoe	Michael Kircher (Karlsruher Institut für Technologie, Germany); Robert Menges (Karlsruher Institut für Technologie, Germany); Gustavo Lenis (Karlsruher Institut für Technologie, Germany); Olaf Doessel (Karlsruher Institut für Technologie, Germany)	Poster session 7	Biosignal processing and monitoring II	P 65	11.09.2017	15:15
Beat-to-beat features in peripheral vascular impedance plethysmography for respiratory rate estimation	Michael Klum (Technische Universität Berlin, Germany); Dennis Osterland (Technische Universität Berlin, Germany); Alexandru-Gabriel Pielmus (Technische Universität Berlin, Germany); Timo Tigges (Technische Universität Berlin, Germany); Reinhold Orglmeister (Technische Universität Berlin, Germany)	Poster session 7	Biosignal processing and monitoring II	P 66	11.09.2017	15:15
Design and implementation of a teaching system for visual stimulation and recording of single unit and mass signals	Qusay Idrees Sarhan (Technische Hochschule Mittelhessen, Germany; University of Duhok, Iraq); Roman Eppinger (Technische Hochschule Mittelhessen, Germany); Stefan Gräf (Technische Hochschule Mittelhessen, Germany); Martin Nguyen (Technische Hochschule Mittelhessen, Germany); Thomas Schanze (Technische Hochschule Mittelhessen, Germany)	Poster session 7	Biosignal processing and monitoring II	P 67	11.09.2017	15:15
Sensor placement in a smart compression shirt to measure spontaneous breathing	Bernhard Laufer (ITeM, Germany); Jörn Kretschmer (ITeM, Germany); Paul David Docherty (University of Canterbury, New Zealand); Knut Möller (ITeM, Germany); Fabian Höflinger (University of Freiburg, Germany); L. Reindl (University of Freiburg, Germany)	Poster session 7	Biosignal processing and monitoring II	P 68	11.09.2017	15:15
Consistent mathematical modelling of the perfusion index and the pulse wave velocity measured by combined fingertip photoplethysmography and the electrocardiogram	Thomas Reich (Technische Universität Berlin, Germany); Timo Tigges (Technische Universität Berlin, Germany); Aarne Feldheiser (Charité - Universitätsmedizin Berlin, Germany); Oliver Hunsicker (Charité - Universitätsmedizin Berlin, Germany); Reinhold Orglmeister (Technische Universität Berlin, Germany); Alexandru-Gabriel Pielmus (Technische Universität Berlin, Germany); Michael Klum (Technische Universität Berlin, Germany)	Poster session 7	Biosignal processing and monitoring II	P 69	11.09.2017	15:15
Saturation correction in pulsed fields of high dose-per-pulse	Malte Gotz (OncoRay, Germany); Leonhard Karsch (OncoRay, Germany); Jörg Pawelke (OncoRay, Germany; Helmholtz-Zentrum Dresden-Rossendorf, Germany)	Poster session 8	Dosimetry, radiation protection and radiation biology I	P 71	11.09.2017	15:15
Investigation of radiation exposure to the ocular lens of urologists due to interventions	Josefin Hartmann (Klinikum Nürnberg, Germany); Michaela Wacker (Klinikum Nürnberg, Germany); Martin Baumüller (Klinikum Nürnberg, Germany); Roland Becker (Klinikum Nürnberg, Germany); Sascha Pahernik (Klinikum Nürnberg, Germany); Michael Wucherer (Klinikum Nürnberg, Germany)	Poster session 8	Dosimetry, radiation protection and radiation biology I	P 72	11.09.2017	15:15
Investigation of the LET-Dependency from BeO using single photon detection for dosimetry in proton beams	Johannes Radtke (TU Dresden, Germany); Thomas Kormoll (TU Dresden, Germany); Leopold Grabs (TU Dresden, Germany); Benjamin Lutz (Helmholtz-Zentrum Dresden-Rossendorf, Germany); Armin Lühr (National Center for Radiation Research in Oncology, Germany); Wolfgang Ullrich (TU Dresden, Germany); Jan Sponner (TU Dresden, Germany); Jürgen Henniger (TU Dresden, Germany)	Poster session 8	Dosimetry, radiation protection and radiation biology I	P 74	11.09.2017	15:15
A novel primary method for the determination of dose to water for kilovoltage X-rays	Steffen Ketelhut (Physikalisch-Technische Bundesanstalt, Germany); Ludwig Büermann (Physikalisch-Technische Bundesanstalt, Germany)	Poster session 8	Dosimetry, radiation protection and radiation biology I	P 75	11.09.2017	15:15
Quantification of patient exposure reduction with dynamic collimation for large detector CTs	Mario Liebmann (Klinikum Links der Weser, Germany; Carl-von-Ossietzky Universität, Germany); Jens Mathis Sauer (Carl-von-Ossietzky Universität, Germany); Daniel Kärcher (Carl-von-Ossietzky Universität, Germany); Björn Poppe (Carl-von-Ossietzky Universität, Germany); Heiner von Boetticher (Carl-von-Ossietzky Universität, Germany)	Poster session 8	Dosimetry, radiation protection and radiation biology I	P 76	11.09.2017	15:15
Influence of a magnetic field on the response of the MR-compatible Exradin A19MR farmer-type ionization chamber	Bhargesh Kandarp Shukla (Deutsches Krebsforschungszentrum (DKFZ), Germany; Heidelberg Institute for Radiation Oncology (HIRO), Germany); Claudia Katharina Spindeldreier (Deutsches Krebsforschungszentrum (DKFZ), Germany; Heidelberg Institute for Radiation Oncology (HIRO), Germany); Oliver Schrenk (Deutsches Krebsforschungszentrum (DKFZ), Germany; Heidelberg Institute for Radiation Oncology (HIRO), Germany); Steffen Grelich (Deutsches Krebsforschungszentrum (DKFZ), Germany; Heidelberg Institute for Radiation Oncology (HIRO), Germany); Christian P Karger (Deutsches Krebsforschungszentrum (DKFZ), Germany; Heidelberg Institute for Radiation Oncology (HIRO), Germany); Asja Pfaffenberger (Deutsches Krebsforschungszentrum (DKFZ), Germany; Heidelberg Institute for Radiation Oncology (HIRO), Germany)	Poster session 8	Dosimetry, radiation protection and radiation biology I	P 77	11.09.2017	15:15

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
In-phantom dosimetry near a ¹⁹² Ir brachytherapy source	Andreas Schönfeld (Carl von Ossietzky Universität Oldenburg, Germany); Katrin Büsing (Carl von Ossietzky Universität Oldenburg, Germany); Dietrich Harder (Prof. em. Georg August Universität Göttingen, Germany); Ndimofo Chofo (Radioonkologische Berufsausübungsgemeinschaft Strahlentherapie Leer, Germany); Björn Poppe (Carl von Ossietzky Universität Oldenburg, Germany)	Poster session 8	Dosimetry, radiation protection and radiation biology I	P 78	11.09.2017	15:15
Investigation of the active volume dimensions of solid-state detectors using the PTB 10 MeV proton microbeam	Daniela Poppinga (Universität Oldenburg, Germany); Björn Delfs (Universität Oldenburg, Germany); Jutta Meyners (Imland Klinik, Germany); Frank Langner (Physikalisch-Technische Bundesanstalt (PTB), Germany); Ulrich Giesen (Physikalisch-Technische Bundesanstalt (PTB), Germany); Dietrich Harder (Universität Göttingen, Germany); Björn Poppe (Universität Oldenburg, Germany); Hui Khee Looe (Universität Oldenburg, Germany)	Poster session 9	Dosimetry, radiation protection and radiation biology II	P 81	11.09.2017	15:15
Monte-Carlo study on the mechanism of the field size dependent overresponse of a synthetic diamond detector: the effects of the structural component densities and of the photon spectrum	Hui Khee Looe (Carl von Ossietzky Universität, Germany); Daniela Poppinga (Carl von Ossietzky Universität, Germany); Björn Delfs (Carl von Ossietzky Universität, Germany); Dietrich Harder (Georg August Universität, Germany); Björn Poppe (Carl von Ossietzky Universität, Germany)	Poster session 9	Dosimetry, radiation protection and radiation biology II	P 82	11.09.2017	15:15
Response of ionization chambers in the presence of magnetic fields	Mohamad Alissa (THM-Gießen, Germany; ,); Philip von Voigts-Rhetz (THM-Gießen, Germany; ,); Klemens Zink (THM-Gießen, Germany; ,)	Poster session 9	Dosimetry, radiation protection and radiation biology II	P 83	11.09.2017	15:15
Development of ultraviolet ray irradiation device for gafchromic XR-SP2 films	Toshizo Katsuda (Butsuryo College of Osaka, Japan); Rumi Gotanda (Ibaraki Prefectural University of Health Sciences, Japan); Tatsuhiro Gotanda (Kawasaki University of Medical Welfare, Japan); Takuya Akagawa (Butsuryo College of Osaka, Japan); Nobuyoshi Tanki (Butsuryo College of Osaka, Japan); Atsushi Noguchi (Butsuryo College of Osaka, Japan); Tadao Kuwano (Okayama University, Japan); Kouichi Yabunaka (The University of Tokyo, Japan)	Poster session 9	Dosimetry, radiation protection and radiation biology II	P 84	11.09.2017	15:15
Optimizing the precision of positioning a 3D-dose distribution measuring device for Brachytherapy applications	Kim-Leigh Gabay (PTB, Germany); Thorsten Schneider (PTB, Germany); Friederike Grote (PTB, Germany); Jürgen Roth (PTB, Germany)	Poster session 9	Dosimetry, radiation protection and radiation biology II	P 85	11.09.2017	15:15
Accuracy and anisotropy of three-dimensional ionization chambers for plan verification in robotic radiosurgery	Britta Loutfi-Krauss (Universitätsklinikum Frankfurt, Germany); Janett Köhn (Universitätsklinikum Frankfurt, Germany); Malte Mielke (Universitätsklinikum Frankfurt, Germany); Christian Scherf (Universitätsklinikum Frankfurt, Germany); Jörg Licher (Universitätsklinikum Frankfurt, Germany); Ulla Ramm (Universitätsklinikum Frankfurt, Germany); Oliver Blanck (Universitätsklinikum Schleswig-Holstein, Germany); Saphir Radiochirurgie Zentrum, Germany)	Poster session 9	Dosimetry, radiation protection and radiation biology II	P 86	11.09.2017	15:15
Capabilities of the metrological electron accelerator facility (MELAF) for research in radiation effects	Andreas Schüller (Physikalisch-Technische Bundesanstalt, Germany); Christoph Makowski (Physikalisch-Technische Bundesanstalt, Germany); Ralf-Peter Kapsch (Physikalisch-Technische Bundesanstalt, Germany)	Poster session 9	Dosimetry, radiation protection and radiation biology II	P 87	11.09.2017	15:15
Assessment of microscopic ion beam field variation using fluorescent nuclear track detectors	Alexander Neuholz (German Cancer Research Center (DKFZ), Germany; Heidelberg Institute for Radiation Oncology (HIRO), National Center for Radiation Research in Oncology (NCRO), Germany); Steffen Greilich (German Cancer Research Center (DKFZ), Germany; Heidelberg Institute for Radiation Oncology (HIRO), National Center for Radiation Research in Oncology (NCRO), Germany)	Poster session 9	Dosimetry, radiation protection and radiation biology II	P 88	11.09.2017	15:15
Development of micro electromechanical biosensor for fast detection of respiratory syncytial virus infections in newborns	Pavel Livshits (Fraunhofer Institut für Mikroelektronische Schaltungen und Systeme, Germany); Andreas Jupe (Fraunhofer Institut für Mikroelektronische Schaltungen und Systeme, Germany); Stefan Kahnert (Fraunhofer Institut für Mikroelektronische Schaltungen und Systeme, Germany); Martin Figge (Fraunhofer Institut für Mikroelektronische Schaltungen und Systeme, Germany); Stefan Mross (Fraunhofer Institut für Mikroelektronische Schaltungen und Systeme, Germany); Michael Goertz (Fraunhofer Institut für Mikroelektronische Schaltungen und Systeme, Germany); Holger Vogt (Fraunhofer Institut für Mikroelektronische Schaltungen und Systeme, Germany); Andreas Goehlich (Fraunhofer Institut für Mikroelektronische Schaltungen und Systeme, Germany)	Poster session 10	Medical measuring techniques I	P 90	11.09.2017	15:15
Registration and evaluation of alternative non-invasive parameters for orthostatic hypotension in geriatric patients	Matthias Goernig (Städtisches Klinikum Dresden, Germany); Sarah Weise (TU Ilmenau, Germany); Maik Pflugrath (TU Berlin, Germany); Jens Haueisen (TU Ilmenau, Germany)	Poster session 10	Medical measuring techniques I	P 91	11.09.2017	15:15

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Investigation of the viscosity of human middle ear effusions by endoscopic optical coherence tomography	Martin Schindler (TU Dresden, Germany); Joseph Morgenstern (TU Dresden, Germany); Julia Walther (TU Dresden, Germany; TU Dresden, Germany); Lars Kirsten (TU Dresden, Germany); Marcus Neudert (TU Dresden, Germany); Thomas Zahnert (TU Dresden, Germany); Edmund Koch (TU Dresden, Germany)	Poster session 10	Medical measuring techniques I	P 93	11.09.2017	15:15
Design of a switched-capacitor array for high-power applications with dense coverage of medium frequency-range	Andre Behrends (Universität zu Lübeck, Germany); Thorsten M. Buzug (Universität zu Lübeck, Germany)	Poster session 10	Medical measuring techniques I	P 94	11.09.2017	15:15
MEMS-FTIR-based reference system for glucose and lactate determination in the NIR wavelength range	Christian Stark (Luebeck University of Applied Sciences (FHL), Germany; University of Lübeck (UzL), Germany); Felix Fiedler (Luebeck University of Applied Sciences (FHL), Germany; University of Lübeck (UzL), Germany); Benjamin Redmer (Luebeck University of Applied Sciences (FHL), Germany; University of Lübeck (UzL), Germany); Reza Behroozian (Luebeck University of Applied Sciences (FHL), Germany; University of Lübeck (UzL), Germany); Stefan Müller (Luebeck University of Applied Sciences (FHL), Germany)	Poster session 10	Medical measuring techniques I	P 95	11.09.2017	15:15
Impedance matching of small laser fabricated double-sided intrafascicular electrode arrays	Matthias Mueller (Albert-Ludwigs-Universität, Germany); Christian Boehler (Albert-Ludwigs-Universität, Germany); Maria Asplund (Albert-Ludwigs-Universität, Germany); Thomas Stieglitz (Albert-Ludwigs-Universität, Germany)	Poster session 10	Medical measuring techniques I	P 96	11.09.2017	15:15
Autonomous powered R wave detector	Daniel Laqua (Technische Universität Ilmenau, Germany); Therese Winkler (Technische Universität Ilmenau, Germany); Konstantin Rönsch (Technische Universität Ilmenau, Germany); Christina Junger (Technische Universität Ilmenau, Germany); Saskia Habermann (Technische Universität Ilmenau, Germany); Peter Husar (Technische Universität Ilmenau, Germany)	Poster session 10	Medical measuring techniques I	P 97	11.09.2017	15:15
Health and sensors: sweat sensing	Harald Mathis (Fraunhofer-Institut FIT, Germany)	Poster session 10	Medical measuring techniques I	P 99	11.09.2017	15:15
Local stress investigation of periprosthetic fractures by total hip replacement - a finite element analysis	Michael Bauer (Institut für Werkstoffkunde/ Leibniz Universität Hannover, Germany); Stephan Brand (Klinik für Unfallchirurgie / Medizinische Hochschule Hannover, Germany); Julian Schrader (Institut für Werkstoffkunde/ Leibniz Universität Hannover, Germany); Christian Krettek (Klinik für Unfallchirurgie / Medizinische Hochschule Hannover, Germany); Hans Jürgen Maier (Institut für Werkstoffkunde/ Leibniz Universität Hannover, Germany); Thomas Hassel (Institut für Werkstoffkunde/ Leibniz Universität Hannover, Germany)	Poster session 11	Modelling and simulation I	P 100	11.09.2017	15:15
Development and validation of a equipment-specific Geant4 model for Elekta Agility collimator	Juliana Cristina Martins (Ludwig-Maximilians-Universität München, Germany); Abdulaziz Alhazmi (Ludwig-Maximilians-Universität München, Germany); Sebastian Neppl (Ludwig-Maximilians-Universität München, Germany); Claus Belka (Ludwig-Maximilians-Universität München, Germany); Michael Reiner (Ludwig-Maximilians-Universität München, Germany); Katia Parodi (Ludwig-Maximilians-Universität München, Germany); Stella Veloza (Ludwig-Maximilians-Universität München, Germany); Universidad Nacional de Colombia, Colombia)	Poster session 11	Modelling and simulation I	P 102	11.09.2017	15:15
Towards PET monitoring at the Austrian ion beam therapy center MedAustron	Heide Rohling (TU Wien, Austria); Hermann Fuchs (Medizinische Universität, Austria); Albert Hirtl (TU Wien, Austria); Marta Mumot (EBG MedAustron GmbH, Austria); Christian Reschl (EBG MedAustron GmbH, Austria); Lembit Sihver (TU Wien, Austria; EBG MedAustron GmbH, Austria); Markus Stock (EBG MedAustron GmbH, Austria)	Poster session 11	Modelling and simulation I	P 105	11.09.2017	15:15
Simulation of electrical fields in cardiac resynchronization therapy and temperature spread in HF ablation	Martin Krämer (University of Applied Sciences, Germany); Matthias Heinke (University of Applied Sciences, Germany); Reinhard Echle (University of Applied Sciences, Germany); Johannes Hörth (University of Applied Sciences, Germany)	Poster session 11	Modelling and simulation I	P 107	11.09.2017	15:15
Monte-Carlo based CT simulation of virtual patients for image guided radiotherapy	Simon Kirchhof (German Cancer Research Center (DKFZ), Germany; Heidelberg Institute for Radiation Oncology (HIRO), Germany; National Center for Radiation Research in Oncology (NCRO), Germany); Kristina Giske (German Cancer Research Center (DKFZ), Germany; Heidelberg Institute for Radiation Oncology (HIRO), Germany; National Center for Radiation Research in Oncology (NCRO), Germany); Lucas Burigo (German Cancer Research Center (DKFZ), Germany; Heidelberg Institute for Radiation Oncology (HIRO), Germany; National Center for Radiation Research in Oncology (NCRO), Germany)	Poster session 11	Modelling and simulation I	P 108	11.09.2017	15:15

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Evaluation of pharmacokinetic models of low-molecular-weight contrast agents for perfusion quantification with dynamic contrast-enhanced magnetic resonance imaging	Stefan Hindel (Universitätsklinikum Essen, Germany); Anika Söhner (Universitätsklinikum Essen, Germany); Marc Maaß (Universitätsklinikum Essen, Germany); Lutz Lüdemann (Universitätsklinikum Essen, Germany)	Poster session 12	Modelling and simulation II	P 109	11.09.2017	15:15
First experiences of a Monte Carlo based plan verification software at the UKGM	Frida Dietz (Technische Hochschule Mittelhessen, Germany); Sascha Bosold (Universitätsklinikum Gießen-Marburg, Germany); Marcus Grimm (MedCom GmbH, Germany); Matthias Söhn (ScientificRT GmbH, Germany); Rita Engenhart-Cabillic (Universitätsklinikum Gießen-Marburg, Germany); Klemens Zink (Technische Hochschule Mittelhessen, Germany; Universitätsklinikum Gießen-Marburg, Germany)	Poster session 12	Modelling and simulation II	P 110	11.09.2017	15:15
Probabilistic based algorithm to simulate ion nuclear reactions in the ion therapy energy range	Maria Jose Gonzalez Torres (Institut für Kern- und Teilchenphysik, TU Dresden, Germany); Jürgen Henniger (Institut für Kern- und Teilchenphysik, TU Dresden, Germany)	Poster session 12	Modelling and simulation II	P 111	11.09.2017	15:15
MR Radiomics features of brain metastasis allow for primary tumor identification	Frederic Madesta (Universitätsklinikum Hamburg-Eppendorf, Germany); Helge Kniep (Universitätsklinikum Hamburg-Eppendorf, Germany); Tobias Gauer (Universitätsklinikum Hamburg-Eppendorf, Germany); Tanja Schneider (Universitätsklinikum Hamburg-Eppendorf, Germany); Susanne Siemonsen (Universitätsklinikum Hamburg-Eppendorf, Germany); René Werner (Universitätsklinikum Hamburg-Eppendorf, Germany)	Poster session 12	Modelling and simulation II	P 112	11.09.2017	15:15
Degradation of sponge structures made of magnesium alloys as bone replacement material	Ann-Kathrin Krüger (Institut für Kontinuumsmechanik, Germany); Stefan Julmi (Institut für Werkstoffkunde, Germany); Christian Klose (Institut für Werkstoffkunde, Germany); Silke Besdo (Institut für Kontinuumsmechanik, Germany); Hans Jürgen Maier (Institut für Werkstoffkunde, Germany); Peter Wriggers (Institut für Kontinuumsmechanik, Germany)	Poster session 12	Modelling and simulation II	P 113	11.09.2017	15:15
Differential equations and cellular automata for avascular tumor growth	Jörg Wassenberg (Westfälische Hochschule, Germany); Waldemar Zylka (Westfälische Hochschule, Germany)	Poster session 12	Modelling and simulation II	P 116	11.09.2017	15:15
Models and simulation of central retinal vein pulsation for education and training in ophthalmology	Ute Morgenstern (Technische Universität Dresden, Germany); Dhara Bhavsar (Technische Universität Dresden, Germany); Richard Stodtmeister (Technische Universität Dresden, Germany)	Poster session 12	Modelling and simulation II	P 117	11.09.2017	15:15
Manufacturing and thermal treatment of degradable magnesium bone cages	Christine Donay (Institut für Textiltechnik der RWTH Aachen University, Germany); Janine Doeringer (Institut für Textiltechnik der RWTH Aachen University, Germany); Thomas Gries (Institut für Textiltechnik der RWTH Aachen University, Germany); Stefan Jockenhoevel (Institut für Textiltechnik der RWTH Aachen University, Germany; Institute for Applied Medical Engineering, Germany); Alexander Löwen (Institut für Textiltechnik der RWTH Aachen University, Germany)	Poster session 13	Organ and patient support systems I	P 119	11.09.2017	15:15
Complex braids for medical applications	Lukas Löhmer (Institut für Textiltechnik der RWTH Aachen University, Germany); Kathrin Kurtenbach (Institut für Textiltechnik der RWTH Aachen University, Germany); Thomas Gries (Institut für Textiltechnik der RWTH Aachen University, Germany); Stefan Jockenhövel (Institut für Textiltechnik der RWTH Aachen University, Germany; Institute of Applied Medical Engineering, Germany)	Poster session 13	Organ and patient support systems I	P 120	11.09.2017	15:15
Generating informative standard values of maximum forces and anthropometric data of the shoulder in pupils of classes 5 to 12 by means of an accessory to the HFD 200 hand and finger dynamometer diagnostics and therapy system	Cornelius Weber (Diakonissenanstalt, Germany); Hansjörg Weber (Niederlassung als Allgemeinmediziner/Arbeitsmedizin, Germany)	Poster session 13	Organ and patient support systems I	P 121	11.09.2017	15:15
Impact of insertion velocity on insertion forces in cochlear implantation surgery	Silke Hügl (Medizinische Hochschule Hannover, Germany); Katharina Rüländer (Medizinische Hochschule Hannover, Germany; Fachhochschule Münster, Germany); Thomas Lenarz (Medizinische Hochschule Hannover, Germany; Medizinische Hochschule Hannover, Germany); Omid Majdani (Medizinische Hochschule Hannover, Germany); Thomas S. Rau (Medizinische Hochschule Hannover, Germany)	Poster session 13	Organ and patient support systems I	P 122	11.09.2017	15:15
Evaluation of design limits for implantable high channel count connectors	Julia Koch (IMTEK, Universität Freiburg, Germany); Martin Schuettler (CorTec GmbH, Germany); Thomas Stieglitz (IMTEK, Universität Freiburg, Germany)	Poster session 13	Organ and patient support systems I	P 123	11.09.2017	15:15

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Perception thresholds of cutaneous electric stimulation around the upper arm	Stephan Lau (Technical University Ilmenau, Germany); Patrique Fiedler (Technical University Ilmenau, Germany); Alexander Hunold (Technical University Ilmenau, Germany); Elke Haase (Technical University Dresden, Germany); Daniel Gröllich (Technical University Dresden, Germany); Kathrin Pietsch (Technical University Dresden, Germany); Katrin Höhn (Technical University Dresden, Germany); Martin Schmauder (Technical University Dresden, Germany); Hartmut Rödel (Technical University Dresden, Germany); Jens Hauelsen (Technical University Ilmenau, Germany)	Poster session 13	Organ and patient support systems I	P 125	11.09.2017	15:15
Lifetime testing for flexible smart implants	Lena Bleck (NMI Naturwissenschaftliches und Medizinisches Institut, Germany); Jennifer Erb (NMI Naturwissenschaftliches und Medizinisches Institut, Germany); Rene von Metzen (NMI Naturwissenschaftliches und Medizinisches Institut, Germany); Alfred Stett (NMI Naturwissenschaftliches und Medizinisches Institut, Germany)	Poster session 13	Organ and patient support systems I	P 126	11.09.2017	15:15
Development of a system test procedure (STP) for CT-guided HDR brachytherapy	Fabian Krause (Universitätsklinikum S-H, Campus Kiel, Germany); Franziska Risske (Universitätsklinikum S-H, Campus Kiel, Germany); Susann Bohn (Universitätsklinikum S-H, Campus Kiel, Germany); Frank-Andre Siebert (Universitätsklinikum S-H, Campus Kiel, Germany)	Poster session 14	Radiation therapy I	P 127	11.09.2017	15:15
Fragmentation experiments with helium ions	Felix Horst (Technische Hochschule Mittelhessen, Germany; GSI Helmholtzzentrum für Schwerionenforschung, Germany); Christoph Schuy (GSI Helmholtzzentrum für Schwerionenforschung, Germany); Uli Weber (GSI Helmholtzzentrum für Schwerionenforschung, Germany); Hans-Georg Zaunick (Justus-Liebig-Universität, Germany); Kai-Thomas Brinkmann (Justus-Liebig-Universität, Germany); Klemens Zink (Technische Hochschule Mittelhessen, Germany; Universitätsklinikum Giessen-Marburg, Germany)	Poster session 14	Radiation therapy I	P 128	11.09.2017	15:15
Measurement of tissue stopping-power ratios for ion-range prediction	Tom Russ (German Cancer Research Center (DKFZ), Germany; Heidelberg Institute for Radiation Oncology (HIRO), National Center for Radiation Research in Oncology (NCRO), Germany); Armin Runz (German Cancer Research Center (DKFZ), Germany; Heidelberg Institute for Radiation Oncology (HIRO), National Center for Radiation Research in Oncology (NCRO), Germany); Steffen Greilich (German Cancer Research Center (DKFZ), Germany; Heidelberg Institute for Radiation Oncology (HIRO), National Center for Radiation Research in Oncology (NCRO), Germany); Christian Möhler (German Cancer Research Center (DKFZ), Germany; Heidelberg Institute for Radiation Oncology (HIRO), National Center for Radiation Research in Oncology (NCRO), Germany)	Poster session 14	Radiation therapy I	P 130	11.09.2017	15:15
Development and Monte Carlo simulations of a 3D range-modulator for proton therapy	Yuri Simeonov (Technische Hochschule Mittelhessen, Germany); Uli Weber (GSI Helmholtzzentrum für Schwerionenforschung GmbH, Germany); Petar Penchev (Technische Hochschule Mittelhessen, Germany); Toke Printz Ringbæk (Technische Hochschule Mittelhessen, Germany); Klemens Zink (Technische Hochschule Mittelhessen, Germany; Universitätsklinikum Gießen und Marburg GmbH, Germany)	Poster session 14	Radiation therapy I	P 131	11.09.2017	15:15
Fractionated radiosurgery of uveal tumours by means of HybridArcTM and novalis powered by TrueBeamTMSTx	Markus Wösle (Städtisches Klinikum Dessau, Germany); Philipp Goldschmidt (Städtisches Klinikum Dessau, Germany); Ilja F. Ciernik (Städtisches Klinikum Dessau, Germany)	Poster session 14	Radiation therapy I	P 132	11.09.2017	15:15
Analysis of robustness of proton plans in the treatment planning system RayStation considering setup and range perturbations	Lisa Pschichholz (Klinikum Bielefeld, Germany); Christian Bäumer (Westdeutsches Protonentherapiezentrum Essen (WPE), Germany); Dirk Geismar (Westdeutsches Protonentherapiezentrum Essen (WPE), Germany); Beate Timmermann (Westdeutsches Protonentherapiezentrum Essen (WPE), Germany)	Poster session 14	Radiation therapy I	P 133	11.09.2017	15:15
Retrospective evaluation of patient positioning data and dose exposure considering translation and rotation deviation in linac based stereotactic radiosurgery	Oliver Fielitz (Universitätsklinikum Düsseldorf, Germany); Holger Gottschlag (Universitätsklinikum Düsseldorf, Germany); Ioannis Simiantonakis (Universitätsklinikum Düsseldorf, Germany)	Poster session 14	Radiation therapy I	P 134	11.09.2017	15:15

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Influence of anatomical changes in robust optimized proton plans for bilateral head and neck cancer targets	Macarena Cubillos Mesias (OncoRay – National Center for Radiation Research in Oncology, Medical Faculty and University Hospital Carl Gustav Carus, Technische Universität Dresden, Helmholtz-Zentrum Dresden - Rossendorf, Germany); Michael Baumann (OncoRay – National Center for Radiation Research in Oncology, Medical Faculty and University Hospital Carl Gustav Carus, Technische Universität Dresden, Helmholtz-Zentrum Dresden - Rossendorf, Germany); Esther G.C. Troost (OncoRay – National Center for Radiation Research in Oncology, Medical Faculty and University Hospital Carl Gustav Carus, Technische Universität Dresden, Helmholtz-Zentrum Dresden - Rossendorf, Germany); University Hospital Carl Gustav Carus, Germany; German Cancer Consortium (DKTK), Germany; Helmholtz-Zentrum Dresden-Rossendorf, Germany; National Center for Tumor Diseases, Germany); Fabian Lohaus (OncoRay – National Center for Radiation Research in Oncology, Medical Faculty and University Hospital Carl Gustav Carus, Technische Universität Dresden, Helmholtz-Zentrum Dresden - Rossendorf, Germany); University Hospital Carl Gustav Carus, Germany; German Cancer Consortium (DKTK), Germany); Linda Agolli (University Hospital Carl Gustav Carus, Germany); Maximilian Rehm (University Hospital Carl Gustav Carus, Germany); Christian Richter (OncoRay – National Center for Radiation Research in Oncology, Medical Faculty and University Hospital Carl Gustav Carus, Technische Universität Dresden, Helmholtz-Zentrum Dresden - Rossendorf, Germany); University Hospital Carl Gustav Carus, Germany; German Cancer Consortium (DKTK), Germany; Helmholtz-Zentrum Dresden-Rossendorf, Germany); Kristin Stützer (OncoRay – National Center for Radiation Research in Oncology, Medical Faculty and University Hospital Carl Gustav Carus, Technische Universität Dresden, Helmholtz-Zentrum Dresden - Rossendorf, Germany); Helmholtz-Zentrum Dresden-Rossendorf, Germany)	Poster session 14	Radiation therapy I	P 136	11.09.2017	15:15
Enhanced evaluation criteria for independent dose calculation tested at the MC-based verification software ProSomaCore	Felix Roden (Vivantes Klinikum Neukölln, Germany); Andre Wallin (Vivantes Klinikum Neukölln, Germany); Lukas Henze (Vivantes Klinikum Neukölln, Germany); Andrea Schwahofer (Vivantes Klinikum Neukölln, Germany)	Poster session 14	Radiation therapy I	P 137	11.09.2017	15:15
Evaluation of the stability of healthy volunteers aligned for whole brain irradiation without a mask	Patrick Rauwald-Josephs (Universitätsklinikum Marburg, Germany); Martin Böttcher (Universitätsklinikum Marburg, Germany); Hilke Vorwerk (Universitätsklinikum Marburg, Germany); Klemens Zink (Universitätsklinikum Marburg, Germany); Rita Engenhardt-Cabillic (Universitätsklinikum Marburg, Germany)	Poster session 15	Radiation therapy II	P 138	11.09.2017	15:15
Effective workflow for radiation therapy departments with many VMAT irradiations through the use of Mobius 3D and Fx for plan-related quality assurance and a simple and pragmatic machine-related quality assurance program	Thomas Hauschild (Sozialstiftung Bamberg - MVZ aB, Germany); Maximilian Graf (Elekta GmbH, Germany); Thomas Koch (Sozialstiftung Bamberg - MVZ aB, Germany)	Poster session 15	Radiation therapy II	P 140	11.09.2017	15:15
QALender – a web-based system for supporting quality assurance in radiation therapy	Alexander Stoll (Reutlingen University, Germany); Franz Klein (Reutlingen University, Germany); Oliver Burgert (Reutlingen University, Germany); Christian Thies (Reutlingen University, Germany); Jussi Moog (Universitätsklinikum Tübingen, Germany)	Poster session 15	Radiation therapy II	P 141	11.09.2017	15:15
Influence of TomoTherapy-specific planning parameters on technical treatment parameters and dose distribution	Simon Howitz (Universitätsklinikum Jena, Germany); Klemens Zink (Technische Hochschule Mittelhessen, Germany); Universitätsklinikum Gießen-Marburg, Germany; Frankfurt Institute for Advanced Studies, Germany)	Poster session 15	Radiation therapy II	P 142	11.09.2017	15:15

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Dosimetric characterization of microbeams for radiation therapy at the Munich Compact Light Source	Theresa Urban (Technical University of Munich, Klinikum rechts der Isar, Germany; Technical University of Munich, Germany); Stefan Bartzsch (Technical University of Munich, Klinikum rechts der Isar, Germany); Karin Burger (Technical University of Munich, Klinikum rechts der Isar, Germany; Technical University of Munich, Germany; Technical University of Munich, Germany); Benedikt Günther (Technical University of Munich, Germany; Technical University of Munich, Germany; Max-Planck-Institute of Quantum Optics, Germany); Martin Dierolf (Technical University of Munich, Germany; Technical University of Munich, Germany); Bernhard Gleich (Technical University of Munich, Germany); Klaus Achterhold (Technical University of Munich, Germany; Technical University of Munich, Germany); Stephanie E. Combs (Technical University of Munich, Klinikum rechts der Isar, Germany; Helmholtz Zentrum München, Germany); Franz Pfeiffer (Technical University of Munich, Germany; Technical University of Munich, Germany); Jan J. Wilkens (Technical University of Munich, Klinikum rechts der Isar, Germany; Technical University of Munich, Germany)	Poster session 15	Radiation therapy II	P 143	11.09.2017	15:15
Evaluation of new gantry angle dependence correction factors for pre-treatment IMRT plan verification with MatriXX Multicube Lite® and myQA®	Miriam Eckl (Universitätsmedizin Mannheim, Germany); Arianna Giuliani (IBA Dosimetry, Germany); Ondrej Sevela (IBA Dosimetry, Germany); Frederik Wenz (Universitätsmedizin Mannheim, Germany); Hansjörg Wertz (Universitätsmedizin Mannheim, Germany)	Poster session 15	Radiation therapy II	P 144	11.09.2017	15:15
PRONTOX – a prospective randomized clinical trial for the treatment of non-small cell lung cancer patients at the University Proton Therapy Dresden	Annika Jakobi (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden; Helmholtz-Zentrum Dresden - Rossendorf, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Institute of Radiooncology – OncoRay, Germany; Department of Radiotherapy and Radiation Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Germany); Kristin Stützer (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden; Helmholtz-Zentrum Dresden - Rossendorf, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Institute of Radiooncology – OncoRay, Germany); Julia Thiele (Department of Radiotherapy and Radiation Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Germany); Sebastian Makocki (Department of Radiotherapy and Radiation Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Germany); Esther G.C. Troost (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden; Helmholtz-Zentrum Dresden - Rossendorf, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Institute of Radiooncology – OncoRay, Germany; Department of Radiotherapy and Radiation Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Germany; German Cancer Consortium (DKTK), partner site Dresden, and Germany and German Cancer Research Center (DKFZ), Germany; National Center for Tumor Diseases (NCT), partner site Dresden, Germany); Christian Richter (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden; Helmholtz-Zentrum Dresden - Rossendorf, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Institute of Radiooncology – OncoRay, Germany; Department of Radiotherapy and Radiation Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Germany; German Cancer Consortium (DKTK), partner site Dresden, and Germany and German Cancer Research Center (DKFZ), Germany)	Poster session 15	Radiation therapy II	P 145	11.09.2017	15:15
Density calibration of X-Ray CT using flash proton radiography for ion beam radiotherapy	Nils Peters (GSI Helmholtzzentrum für Schwerionenforschung, Germany); Martin Schanz (GSI Helmholtzzentrum für Schwerionenforschung, Germany)	Poster session 15	Radiation therapy II	P 146	11.09.2017	15:15

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Dose calculation based on Hounsfield Unit calibrated cone beam CT images	Klara Dinkel (LMU Munich, Germany; LMU Munich, Faculty of Physics, Germany); Jan Hofmaier (LMU Munich, Germany); Guillaume Landry (LMU Munich, Faculty of Physics, Germany); Christopher Kurz (LMU Munich, Germany; LMU Munich, Faculty of Physics, Germany); Michael Reiner (LMU Munich, Germany); Katia Parodi (LMU Munich, Faculty of Physics, Germany); Claus Belka (LMU Munich, Germany); Florian Kamp (LMU Munich, Germany)	Poster session 15	Radiation therapy II	P 147	11.09.2017	15:15
Lessons learned about small field dosimetry from the commissioning of a secondary Monte Carlo dose calculation engine for cyberknife	Sebastian Klüter (Universitätsklinikum Heidelberg, Germany); Daniela Schmitt (Universitätsklinikum Heidelberg, Germany); Kai Schubert (Universitätsklinikum Heidelberg, Germany); Laura Wolf (Universitätsklinikum Heidelberg, Germany); Matthias Söhn (ScientificRT GmbH, Germany); Markus Alber (Universitätsklinikum Heidelberg, Germany; ScientificRT GmbH, Germany)	Poster session 15	Radiation therapy II	P 148	11.09.2017	15:15
Investigation of dynamic treatment beam geometries in stereotactic radiosurgery for intracranial lesions involving couch motion and their quality control procedures	Isabelle Brück (Uniklinik RWTH Aachen, Germany); Ahmed Gawish (Uniklinik RWTH Aachen, Germany); Michael J. Eble (Uniklinik RWTH Aachen, Germany)	Poster session 16	Radiation therapy III	P 149	11.09.2017	15:15
Towards clinical quality assurance of deformable image registration for each individual patient: scientific visualization for exploring uncertainties	Kristina Giske (German Cancer Research Center (DKFZ), Germany; National Center for Radiation Research in Oncology (NCRO), Germany; Heidelberg Institute for Radiation Oncology (HIRO), Germany); Hendrik Teske (German Cancer Research Center (DKFZ), Germany; National Center for Radiation Research in Oncology (NCRO), Germany; Heidelberg Institute for Radiation Oncology (HIRO), Germany); Kathrin Bartelheimer (German Cancer Research Center (DKFZ), Germany; National Center for Radiation Research in Oncology (NCRO), Germany; Heidelberg Institute for Radiation Oncology (HIRO), Germany); Rolf Bendl (German Cancer Research Center (DKFZ), Germany; National Center for Radiation Research in Oncology (NCRO), Germany; Heidelberg Institute for Radiation Oncology (HIRO), Germany); Heilbronn University, Germany)	Poster session 16	Radiation therapy III	P 150	11.09.2017	15:15
Combined PET-MR guided focused ultrasound and radiation therapy to improve treatment of cancer	Lisa Landgraf (ICCAS, Germany); Doudou Xu (ICCAS, Germany); Xinrui Zhang (ICCAS, Germany); Ina Patties (ICCAS, Germany); Michael Unger (ICCAS, Germany); Johann Berger (ICCAS, Germany); Shaonan Hu (ICCAS, Germany); Lydia Koi (OncoRay - Center for Radiation Research in Oncology, Germany); Aswin Hoffmann (OncoRay - Center for Radiation Research in Oncology, Germany); Marc Fournelle (Fraunhofer-Institut für Biomedizinische Technik IBMT, Germany); Steffen Tretbar (Fraunhofer-Institut für Biomedizinische Technik IBMT, Germany); Thomas Neumuth (ICCAS, Germany); Andreas Melzer (ICCAS, Germany)	Poster session 16	Radiation therapy III	P 151	11.09.2017	15:15
Development and implementation of 3D-dosimetric end-to-end tests in adaptive radiation therapy of moving tumors	Philipp Mann (German Cancer Research Center, Germany; Heidelberg Institute for Radiation Oncology (HIRO), Germany); Maximilian Witte (German Cancer Research Center, Germany; Heidelberg Institute for Radiation Oncology (HIRO), Germany); Torsten Moser (German Cancer Research Center, Germany; Heidelberg Institute for Radiation Oncology (HIRO), Germany); Clemens Lang (German Cancer Research Center, Germany; Heidelberg Institute for Radiation Oncology (HIRO), Germany); Armin Runz (German Cancer Research Center, Germany; Heidelberg Institute for Radiation Oncology (HIRO), Germany); Wibke Johnen (German Cancer Research Center, Germany; Heidelberg Institute for Radiation Oncology (HIRO), Germany); Jürgen Biederer (University of Heidelberg, Germany; German Lung Research Center (DZL), Germany; Gross-Gerau County Hospital, Germany); Christian Karger (German Cancer Research Center, Germany; Heidelberg Institute for Radiation Oncology (HIRO), Germany)	Poster session 16	Radiation therapy III	P 152	11.09.2017	15:15

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
COMPASS-NRW: A dosimetry initiative of the regional section west of the DGMP (RSW-DGMP) to verify dynamic irradiation techniques	Uwe Heinrichs (Uniklinik RWTH Aachen, Germany); Eric Beckers (Gamma-Knife Zentrum Krefeld, Germany); Andreas Block (Institut für Medizinische Strahlenphysik und Strahlenschutz, Klinikum Dortmund gGmbH, Germany); Isabelle Brück (Uniklinik RWTH Aachen, Germany); Stephan Garbe (Radiologische Universitätsklinik, Strahlentherapie, Germany); Laura Guenther (Klinik für Strahlentherapie und Radio-Onkologie, HELIOS Universitätsklinikum Wuppertal, Universität Witten/Herdecke, Germany); Sedef Ibisi (TU Dortmund, Germany); Katrin Jurianz (Gamma-Knife Zentrum Krefeld, Germany); Martin Kühne (Klinik für Strahlentherapie Köln-Merheim, Kliniken der Stadt Köln gGmbH, Köln, Universität Witten/Herdecke, Germany); Katharina Loot (TU Dortmund, Germany); Arnd Röser (Klinik für Strahlentherapie und Radio-Onkologie, HELIOS Universitätsklinikum Wuppertal, Universität Witten/Herdecke, Germany)	Poster session 16	Radiation therapy III	P 154	11.09.2017	15:15
Software commissioning of a Monte-Carlo model for the double-scattering treatment head at University Proton Therapy Dresden	Jan Eulitz (OncoRay – National Center for Radiation Research in Oncology, Germany); Armin Lühr (OncoRay – National Center for Radiation Research in Oncology, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Germany; German Cancer Consortium (DKTK), partner site Dresden; German Cancer Research Center (DKFZ), Germany); Wolfgang Enghardt (OncoRay – National Center for Radiation Research in Oncology, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Germany; German Cancer Consortium (DKTK), partner site Dresden; German Cancer Research Center (DKFZ), Germany; Helmholtz-Zentrum Dresden - Rossendorf, Germany); Benjamin Lutz (Helmholtz-Zentrum Dresden - Rossendorf, Germany)	Poster session 16	Radiation therapy III	P 155	11.09.2017	15:15
Predicting clinical relative biological effectiveness in proton therapy based on (pre-) clinical dose response	Armin Lühr (Helmholtz-Zentrum Dresden - Rossendorf (HZDR), Germany; OncoRay - National Center for Radiation Research in Oncology, Germany; German Cancer Consortium (DKTK), Germany; German Cancer Research Center (DKFZ), Germany); Cläre von Neubeck (OncoRay - National Center for Radiation Research in Oncology, Germany; German Cancer Consortium (DKTK), Germany; German Cancer Research Center (DKFZ), Germany); Michael Baumann (Helmholtz-Zentrum Dresden - Rossendorf (HZDR), Germany; OncoRay - National Center for Radiation Research in Oncology, Germany; German Cancer Consortium (DKTK), Germany; Technische Universität Dresden, Germany; National Center for Tumor Diseases, Germany; German Cancer Research Center (DKFZ), Germany); Mechthild Krause (Helmholtz-Zentrum Dresden - Rossendorf (HZDR), Germany; OncoRay - National Center for Radiation Research in Oncology, Germany; German Cancer Consortium (DKTK), Germany; Technische Universität Dresden, Germany; National Center for Tumor Diseases, Germany; German Cancer Research Center (DKFZ), Germany); Wolfgang Enghardt (Helmholtz-Zentrum Dresden - Rossendorf (HZDR), Germany; OncoRay - National Center for Radiation Research in Oncology, Germany; German Cancer Consortium (DKTK), Germany; Technische Universität Dresden, Germany; National Center for Tumor Diseases, Germany; German Cancer Research Center (DKFZ), Germany)	Poster session 16	Radiation therapy III	P 156	11.09.2017	15:15
T-REF chamber: a new ion chamber tested for iris quality assurance and output check	Wolfgang W. Baus (Uniklinik, Germany); Georg Altenstein (Uniklinik, Germany)	Poster session 16	Radiation therapy III	P 157	11.09.2017	15:15
Determination of MCVT-Dose in helical IMRT	Sebastian Wellner (Universität Düsseldorf, Germany); Fred Röhner (Radiologische Universitätsklinik, Germany); Thomas Müdder (Radiologische Universitätsklinik, Germany); Felix Schoroth (Radiologische Universitätsklinik, Germany); Timo Wilhelm-Buchstab (Radiologische Universitätsklinik, Germany); Christopher Schmeel (Radiologische Universitätsklinik, Germany); Christina Leitzen (Radiologische Universitätsklinik, Germany); Susanne Vornholt (Radiologische Universitätsklinik, Germany); Stephan Garbe (Radiologische Universitätsklinik, Germany)	Poster session 16	Radiation therapy III	P 158	11.09.2017	15:15
Dosimetric comparison of intensity modulated radiotherapy techniques in head and neck cancer	Marie-Luise Pfeiffer (Universitätsklinikum Schleswig-Holstein, Klinik für Strahlentherapie (Radioonkologie), Kiel, Germany); Jürgen Dunst (Universitätsklinikum Schleswig-Holstein, Klinik für Strahlentherapie (Radioonkologie), Kiel, Germany); Frank-André Siebert (Universitätsklinikum Schleswig-Holstein, Klinik für Strahlentherapie (Radioonkologie), Kiel, Germany)	Poster session 16	Radiation therapy III	P 159	11.09.2017	15:15

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Uptake dynamics of graphene quantum dots into primary human blood cells following in vitro exposure	Thomas Heinzel (HHU Düsseldorf, Germany); Stefan Fasbender (HHU Düsseldorf, Germany); Rainer Haas (Universität, Germany)	Poster session 17	Cells, materials and biochemistry I	P 160	11.09.2017	15:15
Self-cleaning materials using the photocatalytic effect of titanium dioxide	Theresa Fischer (Technische Universität München, Germany); Markus Ahrens (Technische Universität München, Germany); Serhiy Yatsenko (SKZ - German Plastic Center, Germany); Johannes Rudloff (SKZ - German Plastic Center, Germany); Marieluise Lang (SKZ - German Plastic Center, Germany); Peter Heidemeyer (SKZ - German Plastic Center, Germany); Martin Bastian (SKZ - German Plastic Center, Germany); Markus Eblenkamp (Technische Universität München, Germany)	Poster session 17	Cells, materials and biochemistry I	P 161	11.09.2017	15:15
Impedance spectroscopy as a new tool to monitor re-epithelialization in wounded reconstructed human epidermis	Lisa Engelhardt (Universitätsklinikum Würzburg, Germany); Jan Hansmann (Universitätsklinikum Würzburg, Germany); Heike Walles (Universitätsklinikum Würzburg, Germany); Fraunhofer IGB Würzburg, Germany); Florian Groeber-Becker (Fraunhofer IGB Würzburg, Germany)	Poster session 17	Cells, materials and biochemistry I	P 163	11.09.2017	15:15
Engineering of organoid blood vessel patterns with regulated hemodynamics by exosomal functional somatic noncoding RNA angio-morphogens [angiotropins]	Josef H. Wissler (ARCONS Institute for Applied Research & Didactics, Germany)	Poster session 17	Cells, materials and biochemistry I	P 164	11.09.2017	15:15
Differentiating PPIX from its precursors as a strategy for drug-light interval assessment in photodynamic therapy	Rainer Landes (Otto von Guericke University Magdeburg, Germany); Alfredo Illanes (Otto von Guericke University Magdeburg, Germany); Alexander van Oepen (Otto von Guericke University Magdeburg, Germany); Daniela Göppner (Otto von Guericke University Magdeburg, Germany); Harald Gollnick (Otto von Guericke University Magdeburg, Germany); Michael Friebe (Otto von Guericke University Magdeburg, Germany)	Poster session 17	Cells, materials and biochemistry I	P 165	11.09.2017	15:15
Automatic algorithm to generate customized microporous membranes by additive manufacturing	Franz X Bauer (Technische Universität München, Germany); Denise Zapf (Technische Universität München, Germany); Stefan Leonhardt (Technische Universität München, Germany); Katharina Düregger (Technische Universität München, Germany); Markus Eblenkamp (Technische Universität München, Germany)	Poster session 17	Cells, materials and biochemistry I	P 166	11.09.2017	15:15
Additive manufactured multimicrophasic (MMP) systems for biomedical applications: perspectives and concepts	Markus Eblenkamp (Technische Universität München, Germany); Stefan Fischer (Technische Universität München, Germany); Sebastian Pammer (Technische Universität München, Germany); Stefan Leonhardt (Technische Universität München, Germany)	Poster session 17	Cells, materials and biochemistry I	P 168	11.09.2017	15:15
Current developments of an in vitro wound healing experimental system for photobiomodulation therapy research	Jacquelyn Dawn Parente (Furtwangen University, Germany); Sabine Hensler (Furtwangen University, Germany); M. Canziani (Furtwangen University, Germany; University of Buenos Aires, Argentina); Ann-Kathrin Kiefer (Furtwangen University, Germany); Margareta M Mueller (Furtwangen University, Germany); Knut Möller (Furtwangen University, Germany)	Poster session 17	Cells, materials and biochemistry I	P 169	11.09.2017	15:15
Novel three-dimensional (3D) microtissues for the discovery of chemoradiation-sensitizing compounds	Natasa Anastasov (Helmholtz Zentrum München, Germany); Sabine Richter (Helmholtz Zentrum München, Germany); Michael Atkinson (Helmholtz Zentrum München, Germany)	Poster session 18	Cells, materials and biochemistry II	P 172	11.09.2017	15:15
Aspects of functional electro-chemical biocompatibility in microsystems	Cornelius Schilling (Technische Universität Ilmenau, Germany); Mike Stubenrauch (Technische Universität Ilmenau, Germany); Sebastian Köhring (Technische Universität Ilmenau, Germany); Danja Voges (Technische Universität Ilmenau, Germany); Hartmut Witte (Technische Universität Ilmenau, Germany)	Poster session 18	Cells, materials and biochemistry II	P 173	11.09.2017	15:15
Development of cell-laden electrospun hybrid membranes for blood propulsion devices	Giuseppino Fortunato (Empa, Swiss Federal Laboratories for Materials Science and Technology, Switzerland); Lukas Weidenbacher (Empa, Swiss Federal Laboratories for Materials Science and Technology, Switzerland); ETH Zurich, Switzerland); Gökce Yazgan (Empa, Swiss Federal Laboratories for Materials Science and Technology, Switzerland); Anne Géraldine Guex (Empa, Swiss Federal Laboratories for Materials Science and Technology, Switzerland); Anne-sophie Mertgen (Empa, Swiss Federal Laboratories for Materials Science and Technology, Switzerland); ETH Zurich, Switzerland); Markus Rottmar (Empa, Swiss Federal Laboratories for Materials Science and Technology, Switzerland); Katharina Maniura (Empa, Swiss Federal Laboratories for Materials Science and Technology, Switzerland); René Rossi (Empa, Swiss Federal Laboratories for Materials Science and Technology, Switzerland)	Poster session 18	Cells, materials and biochemistry II	P 174	11.09.2017	15:15
The effect of patient-specific parameters on the required quantity of apheresis cycles and the CD34+ yield of autologous stem cell donors	Folker Wenzel (Hochschule Furtwangen, Germany); Olga Janz (Hochschule Furtwangen, Germany); Dijana Pohl (Hochschule Furtwangen, Germany); Svenja Degenhardt (Hochschule Furtwangen, Germany)	Poster session 18	Cells, materials and biochemistry II	P 176	11.09.2017	15:15

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
High resolution photopolymerization technique for fabrication of hydrogel based scaffolds	Mark Vehse (Hochschule Stralsund, Germany); Svea Petersen (Hochschule Osnabrück, Germany); Hermann Seitz (Universität Rostock, Germany)	Poster session 18	Cells, materials and biochemistry II	P 177	11.09.2017	15:15
In vitro release of leuporelin acetate from PLA-based implants	Katharina Prüßmann (Ernst-Moritz-Arndt-Universität Greifswald, Germany); Dana Moritz (Ernst-Moritz-Arndt-Universität Greifswald, Germany); Werner Weitschies (Ernst-Moritz-Arndt-Universität Greifswald, Germany); Anne Seidlitz (Ernst-Moritz-Arndt-Universität Greifswald, Germany)	Poster session 18	Cells, materials and biochemistry II	P 178	11.09.2017	15:15
Laser-induced cell injury in closed microphysiological systems: a novel method to study regeneration processes	Florian Schmieder (Fraunhofer IWS, Germany; University Hospital CGC Dresden, Germany); Deborah Förster (University Hospital CGC Dresden, Germany); Jan Sradnick (University Hospital CGC Dresden, Germany); Bernd Hohenstein (University Hospital CGC Dresden, Germany); Frank Sonntag (Fraunhofer IWS, Germany)	Poster session 19	Cells, materials and biochemistry III	P 182	11.09.2017	15:15
Development of a chemically defined adipocyte/endothelial cell culture system for the use as fatty tissue implant	Ann-Cathrin Volz (Reutlingen University, Germany; University of Hohenheim, Germany); Svenja Nellinger (Reutlingen University, Germany; University of Tuebingen, Germany); Petra Juliane Kluger (Reutlingen University, Germany; Fraunhofer Institute for Interfacial Engineering and Biotechnology, Germany)	Poster session 19	Cells, materials and biochemistry III	P 183	11.09.2017	15:15
Novel ceramic structural composites for personalized bone graft substitutes	Matthias Ahlhelm (Fraunhofer Gesellschaft, Germany); Eric Schwarzer (Fraunhofer Gesellschaft, Germany); Uwe Scheithauer (Fraunhofer Gesellschaft, Germany); Tassilo Moritz (Fraunhofer Gesellschaft, Germany); Alexander Michaelis (Fraunhofer Gesellschaft, Germany)	Poster session 19	Cells, materials and biochemistry III	P 184	11.09.2017	15:15
Concept development and prototyping of a flow cell for blood preparation with acoustophoresis	Felix Fiedler (Lübeck University of Applied Sciences (FHL), Germany; University of Lübeck (UzL), Germany); Alexandra Schlüter (Lübeck University of Applied Sciences (FHL), Germany); Christian Stark (Lübeck University of Applied Sciences (FHL), Germany; University of Lübeck (UzL), Germany); Benjamin Redmer (Lübeck University of Applied Sciences (FHL), Germany; University of Lübeck (UzL), Germany); Reza Behroozian (Lübeck University of Applied Sciences (FHL), Germany; University of Lübeck (UzL), Germany); Stefan Müller (Lübeck University of Applied Sciences (FHL), Germany)	Poster session 19	Cells, materials and biochemistry III	P 185	11.09.2017	15:15
Trace analysis of silver and implant components like titanium, aluminum and vanadium in biological samples	Marie Rinne (Leibniz Universität Hannover, Germany); Carla Vogt (Leibniz Universität Hannover, Germany)	Poster session 19	Cells, materials and biochemistry III	P 187	11.09.2017	15:15
Measurement of tumor marker having a biochemical function in DNA-replication and transcription	Karin Lenger (Institute for Scientific Homeopathy, Germany)	Poster session 19	Cells, materials and biochemistry III	P 190	11.09.2017	15:15
IT-based psychoacoustic auditory diagnostic methods: Expert knowledge vs. machine learning technology?	Birger Kollmeier (Universität Oldenburg, Germany)	Network session 1	IT based diagnostics of hearing	NW 1	11.09.2017	15:15
Intraoperative objective physiology based audiological methods	Hannes Maier (Medizinische Hochschule Hannover, Germany); Andreas Büchner (Medizinische Hochschule Hannover, Germany); Sabine Haumann (Medizinische Hochschule Hannover, Germany); Mohammad Ghoncheh (Medizinische Hochschule Hannover, Germany); Thomas Lenarz (Medizinische Hochschule Hannover, Germany)	Network session 1	IT based diagnostics of hearing	NW 2	11.09.2017	15:15
Common audiological functional parameters (CAFPAs): diagnostic concept	Mareike Buhl (Universität Oldenburg, Germany; Cluster of Excellence Hearing4all, Germany); Marc René Schädler (Universität Oldenburg, Germany; Cluster of Excellence Hearing4all, Germany); Anna Warzybok (Universität Oldenburg, Germany; Cluster of Excellence Hearing4all, Germany); Jörg Lücke (Cluster of Excellence Hearing4all, Germany; Universität Oldenburg, Germany); Birger Kollmeier (Universität Oldenburg, Germany; Cluster of Excellence Hearing4all, Germany)	Network session 1	IT based diagnostics of hearing	NW 3	11.09.2017	15:15
Audiological measurement methods and auditory models: What is the state-of-the-art?	Thomas Brand (Universität Oldenburg, Germany); Christopher Hauth (Universität Oldenburg, Germany)	Network session 1	IT based diagnostics of hearing	NW 4	11.09.2017	15:15
Forecast of hearing performance in cochlear implant candidates using a prediction model	Andreas Buechner (Medizinische Hochschule Hannover, Germany); Sabine Haumann (Medizinische Hochschule Hannover, Germany); Volker Hohmann (Carl von Ossietzky-Universität, Germany); Hannes Maier (Medizinische Hochschule Hannover, Germany); Thomas Lenarz (Medizinische Hochschule Hannover, Germany)	Network session 1	IT based diagnostics of hearing	NW 5	11.09.2017	15:15
Vorhersage des Versorgungserfolges mit Hörgeräten	Marc René Schädler (Carl von Ossietzky Universität, Germany); Anna Warzybok (Carl von Ossietzky Universität, Germany); Birger Kollmeier (Carl von Ossietzky Universität, Germany)	Network session 1	IT based diagnostics of hearing	NW 6	11.09.2017	15:15
Klinische Einführung: Forschungscampus M ² OLIE	Steffen Diehl (Universitätsmedizin Mannheim, Germany)	Network session 2	Mannheim Molecular Intervention Environment (M ² OLIE) – a physical and technological approach to minimally invasive intervention for oligo-metastasised patients	NW 7	11.09.2017	15:15

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Multi-modal imaging	Frank G. Zöllner (Heidelberg University, Germany); Tanja Gaa (Heidelberg University, Germany); Wiebke Neumann (Heidelberg University, Germany); Gordian Kabelitz (Heidelberg University, Germany); Khanlian Chung (Heidelberg University, Germany); Barbara Trimborn (University of Applied Sciences Mannheim, Germany); Ivo Wolf (University of Applied Sciences Mannheim, Germany); Lothar R Schad (Heidelberg University, Germany)	Network session 2	Mannheim Molecular Intervention Environment (M ² OLIE) – a physical and technological approach to minimally invasive intervention for oligo-metastasised patients	NW 8	11.09.2017	15:15
Automation technologies in intervention rooms	Jan Stallkamp (Fraunhofer, Germany)	Network session 2	Mannheim Molecular Intervention Environment (M ² OLIE) – a physical and technological approach to minimally invasive intervention for oligo-metastasised patients	NW 9	11.09.2017	15:15
Mass spectrometry imaging-based molecular biopsy analysis in the Mannheim Molecular Intervention Environment (M ² OLIE)	Carsten Hopf (Hochschule Mannheim, Germany); Denis A. Sammour (Hochschule Mannheim, Germany); Katrin Erich (Hochschule Mannheim, Germany); Jan-Hinrich Rabe (Hochschule Mannheim, Germany); Alexander Geisel (Hochschule Mannheim, Germany); Christian Marsching (Hochschule Mannheim, Germany); Alexander Marx (Universitätsmedizin Mannheim, Germany); Sandra Schulz (Hochschule Mannheim, Germany)	Network session 2	Mannheim Molecular Intervention Environment (M ² OLIE) – a physical and technological approach to minimally invasive intervention for oligo-metastasised patients	NW 10	11.09.2017	15:15
Radiopharmaceuticals for non-invasive diagnostic imaging and molecular radiotherapy	Shanna Litau (Medizinische Fakultät Mannheim der Universität Heidelberg, Germany; Medizinische Fakultät Mannheim der Universität Heidelberg, Germany); Carmen Wängler (Medizinische Fakultät Mannheim der Universität Heidelberg, Germany); Marc Pretze (Medizinische Fakultät Mannheim der Universität Heidelberg, Germany); Björn Wängler (Medizinische Fakultät Mannheim der Universität Heidelberg, Germany)	Network session 2	Mannheim Molecular Intervention Environment (M ² OLIE) – a physical and technological approach to minimally invasive intervention for oligo-metastasised patients	NW 11	11.09.2017	15:15
Robotic assisted applications inside the molecular interventional room.	Sven Clausen (Universitätsmedizin Mannheim, Germany); Andreas Rothfuss (Fraunhofer IPA, Germany); Frederik Wenz (Universitätsmedizin Mannheim, Germany); Jan Stallkamp (Fraunhofer IPA, Germany)	Network session 2	Mannheim Molecular Intervention Environment (M ² OLIE) – a physical and technological approach to minimally invasive intervention for oligo-metastasised patients	NW 12	11.09.2017	15:15
Modular systems and lightweight construction concepts - new possibilities for the defect-specific treatment of hip joint diseases	Torsten Prietzel (HELIOS Klinik Blankenhain, Germany); Michael Schmidt (Universität Leipzig, Germany); Kopper Michael (Forschungs- und Transferzentrum e.V an der Westsächsischen Hochschule Zwickau, Germany); Thomas Töppel (Fraunhofer IWU, Germany); Sibylle Hanus (TITV Greiz - Das Institut für Spezialtextilien und flexible Materialien Textilforschungsinstitut Thüringen-Vogtland e.V., Germany); Ronny Grunert (Fraunhofer IWU, Germany; Universität Leipzig, Germany)	Network session 3	Therapy of diseases of the musculoskeletal system	NW 13	11.09.2017	15:15
Development of a measuring system for the investigation of the force and the damping situation during the making of conical clamping between THA-shaft and -head	Toni Wendler (Universitätsklinikum Leipzig – KOUP und Plastische Chirurgie, Germany); Dirk Jörg Zajonz (Universitätsklinikum Leipzig – KOUP und Plastische Chirurgie, Germany); Stefan Schleifenbaum (Universitätsklinikum Leipzig – KOUP und Plastische Chirurgie, Germany); Torsten Prietzel (HELIOS Klinik, Germany)	Network session 3	Therapy of diseases of the musculoskeletal system	NW 14	11.09.2017	15:15
Applied research in the field of medical engineering in interdisciplinary networks of physicans and engineers - challenges and results	Christian Rotsch (Fraunhofer-Institut für Werkzeugmaschinen und Umformtechnik IWU, Germany); Ronny Grunert (Fraunhofer-Institut für Werkzeugmaschinen und Umformtechnik IWU, Germany); Michael Werner (Fraunhofer-Institut für Werkzeugmaschinen und Umformtechnik IWU, Germany); Lars Mehlhorn (Fraunhofer-Institut für Werkzeugmaschinen und Umformtechnik IWU, Germany)	Network session 3	Therapy of diseases of the musculoskeletal system	NW 15	11.09.2017	15:15
Non-invasive measurement of electroencephalographic and electromyographic signals for the development of a brain controlled muscle stimulation system	Marcus Löffler (University of Applied Sciences Zwickau, Germany); Nico Spahn (University of Applied Sciences Zwickau, Germany); Martin Heilemann (University of Applied Sciences Zwickau, Germany; University of Leipzig, Germany); Dominik Wetzler (University of Applied Sciences Zwickau, Germany); Eileen Stark (University of Applied Sciences Zwickau, Germany); Maria Löffler (University of Applied Sciences Zwickau, Germany); Ralf Hinderer (University of Applied Sciences Zwickau, Germany); Silke Kolbig (University of Applied Sciences Zwickau, Germany); Markus Seidel (University of Applied Sciences Zwickau, Germany); Dirk Winkler (University of Leipzig, Germany)	Network session 3	Therapy of diseases of the musculoskeletal system	NW 16	11.09.2017	15:15
Accuracy study of a 3D printed patient specific brain biopsy system for veterinary medicine	Marcel Müller (Fraunhofer IWU, Germany); Dirk Winkler (Universität Leipzig, Germany); Robert Möbius (ZESBO - Zentrum zur Erforschung der Stütz- und Bewegungsorgane, Germany); Thomas Flegel (Universität Leipzig, Germany); Sarah Hanemann (Universität Leipzig, Germany); Sebastian Scholz (Fraunhofer IWU, Germany); Ronny Grunert (ZESBO - Zentrum zur Erforschung der Stütz- und Bewegungsorgane, Germany; Fraunhofer IWU, Germany)	Network session 3	Therapy of diseases of the musculoskeletal system	NW 17	11.09.2017	15:15

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Proton minibeam therapy: reduction of side effects studied in a mouse ear model	Günther Dollinger (Universität der Bundeswehr München, Germany); Christoph Greubel (Universität der Bundeswehr München, Germany); Judith Reindl (Universität der Bundeswehr München, Germany); Stephanie Girst (Universität der Bundeswehr München, Germany); Benjamin Schwarz (Universität der Bundeswehr München, Germany); Christian Siebenwirth (Universität der Bundeswehr München, Germany); Dieter Walsh (Universität der Bundeswehr München, Germany); Katarina Ilicic (Universität der Bundeswehr München, Germany); Gabriele Multhoff (Universität der Bundeswehr München, Germany); Jan Wilkens (Universität der Bundeswehr München, Germany); Thomas E. Schmid (Universität der Bundeswehr München, Germany)	Session 23	Radiation therapy III – Particle therapy II	V 76	11.09.2017	16:30
Proton minibeam sizes and their influence to reduced side effects in an in-vivo mouse ear model	Matthias Sammer (Universität der Bundeswehr München, Germany); Judith Reindl (Universität der Bundeswehr München, Germany); Esther Zahnbrecher (TU München, Germany); Christoph Greubel (Universität der Bundeswehr München, Germany); Stefanie Girst (Universität der Bundeswehr München, Germany); Benjamin Schwarz (Universität der Bundeswehr München, Germany); Christian Siebenwirth (Universität der Bundeswehr München, Germany); Dietrich W.M. Walsh (TU München, Germany); Katarina Ilicic (TU München, Germany); Sophie Dobiasch (TU München, Germany); Jan J. Wilkens (TU München, Germany); Helmholtz Zentrum München, Germany); Thomas Schmid (TU München, Germany); Helmholtz Zentrum München, Germany); Günther Dollinger (Universität der Bundeswehr München, Germany)	Session 23	Radiation therapy III – Particle therapy II	V 77	11.09.2017	16:30
Preparation of small animal irradiation experiments with laser-accelerated protons	Florian Kroll (Helmholtz-Zentrum Dresden - Rossendorf, Germany); Technische Universität Dresden, Germany); Elke Beyreuther (Helmholtz-Zentrum Dresden - Rossendorf, Germany); Florian-Emanuel Brack (Helmholtz-Zentrum Dresden - Rossendorf, Germany); Technische Universität Dresden, Germany); Lennart Gaus (Helmholtz-Zentrum Dresden - Rossendorf, Germany); Technische Universität Dresden, Germany); Leonhard Karsch (OncoRay, Germany); Stephan Kraft (Helmholtz-Zentrum Dresden - Rossendorf, Germany); Josefine Metzkes (Helmholtz-Zentrum Dresden - Rossendorf, Germany); Jörg Pawelke (Helmholtz-Zentrum Dresden - Rossendorf, Germany); OncoRay, Germany); Hans-Peter Schlenvoigt (Helmholtz-Zentrum Dresden - Rossendorf, Germany); Michael Schürer (OncoRay, Germany); Karl Zeil (Helmholtz-Zentrum Dresden - Rossendorf, Germany); Ulrich Schramm (Helmholtz-Zentrum Dresden - Rossendorf, Germany); Technische Universität Dresden, Germany)	Session 23	Radiation therapy III – Particle therapy II	V 78	11.09.2017	16:30
Ion computed tomography: experimental results and clinical potential	Sebastian Meyer (Ludwig-Maximilians-Universität München, Germany); Lorena Magallanes (Ludwig-Maximilians-Universität München, Germany; Heidelberg University Hospital, Germany); Benedikt Kopp (Ludwig-Maximilians-Universität München, Germany; Heidelberg University Hospital, Germany); Thomas Tessonnier (Ludwig-Maximilians-Universität München, Germany; Heidelberg University Hospital, Germany); Maximilian Göppel (Ludwig-Maximilians-Universität München, Germany); Bernd Voss (GSI Helmholtz Centre for Heavy Ion Research, Germany); Florian Kamp (Ludwig-Maximilians-Universität München, Germany); Claus Belka (Ludwig-Maximilians-Universität München, Germany); David Joel Carlson (Yale University School of Medicine, United States); Chiara Gianoli (Ludwig-Maximilians-Universität München, Germany); Katia Parodi (Ludwig-Maximilians-Universität München, Germany; Heidelberg University Hospital, Germany)	Session 23	Radiation therapy III – Particle therapy II	V 79	11.09.2017	16:30
Analytical investigation on the role of ion radiography for Hounsfield Unit conversion into relative stopping power in ion beam therapy	Maximilian Göppel (Ludwig-Maximilians-Universität München, Germany); Sebastian Meyer (Ludwig-Maximilians-Universität München, Germany); Lorena Magallanes (Ludwig-Maximilians-Universität München, Germany; Heidelberg University Hospital, Germany); Benedikt Kopp (Ludwig-Maximilians-Universität München, Germany; Heidelberg University Hospital, Germany); Katia Parodi (Ludwig-Maximilians-Universität München, Germany; Heidelberg University Hospital, Germany); Chiara Gianoli (Ludwig-Maximilians-Universität München, Germany)	Session 23	Radiation therapy III – Particle therapy II	V 80	11.09.2017	16:30

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Monte Carlo simulation and experimental validation of magnetic field effects on proton dose distributions	Sonja Schellhammer (Helmholtz-Zentrum Dresden - Rossendorf, Germany; OncoRay – National Center for Radiation Research in Oncology, Germany); Armin Lühr (Helmholtz-Zentrum Dresden - Rossendorf, Germany; OncoRay – National Center for Radiation Research in Oncology, Germany; German Cancer Consortium DKTK, Germany); Sebastian Gantz (Helmholtz-Zentrum Dresden - Rossendorf, Germany; OncoRay – National Center for Radiation Research in Oncology, Germany); Brad Oborn (Wollongong Hospital, Australia; University of Wollongong, Australia); Omid Zarini (Helmholtz-Zentrum Dresden - Rossendorf, Germany); Patrick Wohlfahrt (Helmholtz-Zentrum Dresden - Rossendorf, Germany; OncoRay – National Center for Radiation Research in Oncology, Germany); Karl Zeil (Helmholtz-Zentrum Dresden - Rossendorf, Germany); Michael Bussmann (Helmholtz-Zentrum Dresden - Rossendorf, Germany); Aswin Hoffmann (Helmholtz-Zentrum Dresden - Rossendorf, Germany; OncoRay – National Center for Radiation Research in Oncology, Germany; Department of Radiation Oncology, Germany)	Session 23	Radiation therapy III – Particle therapy II	V 81	11.09.2017	16:30
Dosimetric validation of T1/T2 only pseudo-CT for proton therapy	Giampaolo Pileggi (DKFZ, Germany; Magna Graecia University, Italy); Christoph Speier (Friedrich-Alexander University Erlangen-Nürnberg, Germany); Gregory Sharp (Massachusetts General Hospital, United States); Ciprian Catana (Athinoula A. Martinos Center for Biomedical Imaging, United States); Jennifer Pursley (Massachusetts General Hospital, United States); Joao Seco (DKFZ, Germany); Maria Francesca Spadea (Magna Graecia University, Italy)	Session 23	Radiation therapy III – Particle therapy II	V 82	11.09.2017	16:30
The relative stopping power accuracy of helium CT imaging evaluated using the Monte Carlo method.	Pierluigi Piersimoni (DKFZ, Germany); Vladimir Bashkirov (LOMA LINDA UNIVERSITY, United States); Bruce Faddegon (University of California San Francisco, United States); José Ramos Méndez (University of California San Francisco, United States); Reinhard Schulte (LOMA LINDA UNIVERSITY, United States); Joao Seco (DKFZ, Germany)	Session 24	Imaging and image processing II – X-Ray and multimodal imaging	V 83	11.09.2017	16:30
Detection of cherenkov light from compton scattered electrons for medical applications	Ayesha Ali (Universität Siegen, Germany); Hedia Bäcker (Universität Siegen, Germany); Reimund Bayerlein (Universität Siegen, Germany); Randy Brill (Universität, United States); Rainer Brück (Universität, Germany); Tuba Conka (Universität, United States); Ivor Fleck (Universität Siegen, Germany); Lars Furenlid (Universität, United States); Stefan Heidbrink (Universität Siegen, Germany); Waleed Khalid (Universität Siegen, Germany); Matthias Mielke (Universität, Germany); Rico Schmidtbauer (Universität Siegen, Germany); Albert Walenta (Universität Siegen, Germany); Ulrich Werthenbach (Universität Siegen, Germany); Jens Winter (Universität Siegen, Germany); Michael Ziolkowski (Universität Siegen, Germany)	Session 24	Imaging and image processing II – X-Ray and multimodal imaging	V 85	11.09.2017	16:30
Development of a tissue-equivalent phantom for multimodal imaging of the prostate	Marie Wegner (Technische Universität Hamburg, Germany; Universitätsklinikum Hamburg Eppendorf, Germany); Johanna Spallek (Technische Universität Hamburg, Germany); Michael Kaul (Universitätsklinikum Hamburg Eppendorf, Germany); Marco Mittag (Universität Hamburg, Germany); Elisabetta Gargioni (Universitätsklinikum Hamburg Eppendorf, Germany)	Session 24	Imaging and image processing II – X-Ray and multimodal imaging	V 86	11.09.2017	16:30
Performance evaluation of MADPET4: a high resolution preclinical PET insert for 7T MRI	Negar Omidvari (Klinikum rechts der Isar, Germany); Jorge Cabello (Klinikum rechts der Isar, Germany); Geoffrey Topping (Klinikum rechts der Isar, Germany); Florian R. Schneider (Klinikum rechts der Isar, Germany; Now with KETEK GmbH, Germany); Stephan Paul (Technische Universität München, Germany); Sibylle I. Ziegler (Klinikum rechts der Isar, Germany; Klinikum der Universität München, Germany)	Session 24	Imaging and image processing II – X-Ray and multimodal imaging	V 87	11.09.2017	16:30
Heat resistant electronic modules for traceable intelligent medical sterile containers	Lukas Böhler (Aesculap AG, Germany; AGH University of Science and Technology, Poland); Mateusz Daniol (Aesculap AG, Germany; AGH University of Science and Technology, Poland); Anton Keller (Aesculap AG, Germany); Ryszard Sroka (AGH University of Science and Technology, Poland)	Session 25	User friendliness, risk management and hospital technology	V 88	11.09.2017	16:30
Sterilisable energy source for intelligent medical containers	Mateusz Daniol (Aesculap AG, Germany; AGH University of Science and Technology, Poland); Lukas Böhler (Aesculap AG, Germany; AGH University of Science and Technology, Poland); Anton Keller (Aesculap AG, Germany); Ryszard Sroka (AGH University of Science and Technology, Poland)	Session 25	User friendliness, risk management and hospital technology	V 89	11.09.2017	16:30

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Model to assess the impact on patient hypothermia of different ventilation systems in the operating room	Clemens Bulitta (Ostbayerische Technische Hochschule Amberg-Weiden, Germany); Dominik Lobenhofer (Ostbayerische Technische Hochschule Amberg-Weiden, Germany); Sebastian Buhl (Ostbayerische Technische Hochschule Amberg-Weiden, Germany)	Session 25	User friendliness, risk management and hospital technology	V 92	11.09.2017	16:30
4K vs HD resolution in laparoscopic surgery	Jonas Johannink (Universitätsklinikum Tübingen, Germany); Melanie Moroff (Universitätsklinikum Tübingen, Germany); Johanna Miller (Universitätsklinikum Tübingen, Germany); Peter Wilhelm (Universitätsklinikum Tübingen, Germany); Andreas Kirschniak (Universitätsklinikum Tübingen, Germany)	Session 25	User friendliness, risk management and hospital technology	V 93	11.09.2017	16:30
Risk management in radiotherapy - patient identification and patient verification	Jörg Licher (Universitätsklinikum Frankfurt, Germany); Janett Köhn (Universitätsklinikum Frankfurt, Germany); Britta Loutfi-Krauß (Universitätsklinikum Frankfurt, Germany); Christian Scherf (Universitätsklinikum Frankfurt, Germany); Ulla Ramm (Universitätsklinikum Frankfurt, Germany)	Session 25	User friendliness, risk management and hospital technology	V 94	11.09.2017	16:30
Cortical thickness and porosity assessment on ex-vivo tibiae using axial ultrasound transmission	Johannes Schneider (Charité Universitätsmedizin Berlin, Germany); Donatien Ramiandriosa (Charité Universitätsmedizin Berlin, Germany; Sorbonne Universities, France); Gianluca Iori (Charité Universitätsmedizin Berlin, Germany); Melanie Gräsel (Universitätsklinikum Schleswig-Holstein, Germany); Reinhard Barkmann (Universitätsklinikum Schleswig-Holstein, Germany); Kay Raum (Charité Universitätsmedizin Berlin, Germany); Pascal Laugier (Sorbonne Universities, France); Jean-Gabriel Minonzio (Sorbonne Universities, France)	Session 26	Biosignal processing and monitoring II	V 96	11.09.2017	16:30
The influence of gestational age on the maternal–foetal causal cardiac coupling	Andreas Voss (Ernst-Abbe-Hochschule Jena, Germany); Steffen Schulz (Ernst-Abbe-Hochschule Jena, Germany); Ahsan Khandoker (Ernst-Abbe-Hochschule Jena, Germany)	Session 26	Biosignal processing and monitoring II	V 98	11.09.2017	16:30
Screening for sleep apnea in routine Holter ECGs – a prospective evaluation	Christoph Maier (Hochschule Heilbronn, Germany); Hartmut Dickhaus (Universitätsklinikum Heidelberg, Germany); Hugo Katus (Universitätsklinikum Heidelberg, Germany); Jörg Friedrich (Universitätsklinikum Heidelberg, Germany)	Session 26	Biosignal processing and monitoring II	V 100	11.09.2017	16:30
Bioelectronic medicine – promises and challenges	Thomas Stieglitz (University of Freiburg, Germany)	Session 27	Bioelectronics and electroceuticals	FS 37	11.09.2017	16:30
Nerve cuff electrodes for electrically interfacing with the peripheral nervous system	Martin Schuettler (CorTec GmbH, Germany); Colin Bierbrauer (CorTec GmbH, Germany); Ronny Pfeifer (CorTec GmbH, Germany); Miguel Ulloa (CorTec GmbH, Germany); Christian Henle (CorTec GmbH, Germany); Joern Rickert (CorTec GmbH, Germany)	Session 27	Bioelectronics and electroceuticals	FS 38	11.09.2017	16:30
Bioelectronic approach for diabetes therapy	René von Metzen (Universität Tübingen, Germany); Udo Kraushaar (Universität Tübingen, Germany); Alfred Stett (Universität Tübingen, Germany)	Session 27	Bioelectronics and electroceuticals	FS 39	11.09.2017	16:30
Baroloop – selective vagal stimulation to treat hypertension	Dennis Plachta (neuroloop, Germany)	Session 27	Bioelectronics and electroceuticals	FS 40	11.09.2017	16:30
Device-mediated-therapy – a neurosurgeon's perspective on implant design and device location	Mortimer Gierthmühlen (Klinik für Neurochirurgie, Germany); Dennis Plachta (Klinik für Neurochirurgie, Germany); Thomas Stieglitz (Klinik für Neurochirurgie, Germany); Josef Zentner (Klinik für Neurochirurgie, Germany)	Session 27	Bioelectronics and electroceuticals	FS 41	11.09.2017	16:30
Exposure in CT: Measurements of CTDI and DLP, guidelines and diagnostic reference levels	Georg Stamm (Universitätsmedizin Göttingen, Germany); Martin Fiebich (Technische Hochschule Mittelhessen, Germany)	Session 28	CT-optimisation I	FS 42	11.09.2017	16:30
Parameters that influence image quality and dose	Martin Fiebich (Technische Hochschule Mittelhessen, Germany)	Session 28	CT-optimisation I	FS 43	11.09.2017	16:30
Three-dimensional calculation against mutually changed isodoses in brachytherapy due to inhomogeneity-based dose calculations	Mathias Walke (Universitätsklinikum Magdeburg, Germany); Yuliya Durnyeva (Universitätsklinikum Magdeburg, Germany); Peter Hass (Universitätsklinikum Magdeburg, Germany); Jan Scheermann (Universitätsklinikum Magdeburg, Germany); Sebastian Senz (Universitätsklinikum Magdeburg, Germany); Caroline Gabriel (Universitätsklinikum Magdeburg, Germany); Günther Gademann (Universitätsklinikum Magdeburg, Germany)	Session 29	Comparison of TG-43 and advanced dose calculation algorithms	FS 44	11.09.2017	16:30
Impact of heterogeneity-corrected dose calculation using a grid-based Boltzmann solver on breast and cervix cancer brachytherapy	Julia Hofbauer (Krankenhaus Hietzing, Austria; Medical University of Vienna, Austria); Christian Kirisits (Medical University of Vienna, Austria; Medical University of Vienna, Austria); Alexandra Resch (Medical University of Vienna, Austria); Yingjie Xu (Chinese Academy of Medical Sciences, China); Alina Sturdza (Medical University of Vienna, Austria); Richard Pötter (Medical University of Vienna, Austria; Medical University of Vienna, Austria); Nicole Nesvacil (Medical University of Vienna, Austria; Medical University of Vienna, Austria)	Session 29	Comparison of TG-43 and advanced dose calculation algorithms	FS 46	11.09.2017	16:30

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Phantom study to compare dose calculation in Oncentra Brachy TG-43 and ACE for skin treatments with superficial mould (Freiburg-Flab)	Renate Walter (Klinikum Augsburg, Germany); Frank Hensley (Ruprechts-Karl-Universität Heidelberg, Germany); Jürgen Kopp (Klinikum Augsburg, Germany); Georg Stüben (Klinikum Augsburg, Germany); Nikolaos Balagiannis (Klinikum Augsburg, Germany)	Session 29	Comparison of TG-43 and advanced dose calculation algorithms	FS 47	11.09.2017	16:30
High-speed kV-CBCT lung cancer imaging within single breath-hold: dose exposure and image quality phantom study	Anna Arns (Universitaetsmedizin Mannheim, Germany); Jens Fleckenstein (Universitaetsmedizin Mannheim, Germany); Frank Schneider (Universitaetsmedizin Mannheim, Germany); Volker Steil (Universitaetsmedizin Mannheim, Germany); Frederik Wenz (Universitaetsmedizin Mannheim, Germany); Hansjoerg Wertz (Universitaetsmedizin Mannheim, Germany)	Session 30	Radiation therapy IV – Tracking	V 102	12.09.2017	08:30
Is the assumption correct that the human body is rigid during couch tracking?	Alexander Jöhl (ETH Zürich, Switzerland; UniversitätsSpital Zürich, Switzerland); Marta Bogowicz (UniversitätsSpital Zürich, Switzerland; Universität Zürich, Switzerland); Stefanie Ehrbar (UniversitätsSpital Zürich, Switzerland; Universität Zürich, Switzerland); Matthias Guckenberger (UniversitätsSpital Zürich, Switzerland; Universität Zürich, Switzerland); Stephan Klöck (UniversitätsSpital Zürich, Switzerland; Universität Zürich, Switzerland); Mirko Meboldt (ETH Zürich, Switzerland); Melanie Zeilinger (ETH Zürich, Switzerland); Marianne Schmid Daners (ETH Zürich, Switzerland); Stephanie Tanadini-Lang (UniversitätsSpital Zürich, Switzerland; Universität Zürich, Switzerland)	Session 30	Radiation therapy IV – Tracking	V 103	12.09.2017	08:30
Dynamic treatment-couch tracking for motion mitigation during prostate SBRT – a geometric and dosimetric validation study	Stefanie Ehrbar (UniversityHospital Zurich and University of Zurich, Switzerland); Simon Schmid (UniversityHospital Zurich and University of Zurich, Switzerland); Alexander Jöhl (UniversityHospital Zurich and University of Zurich, Switzerland); Stephan Klöck (UniversityHospital Zurich and University of Zurich, Switzerland); Matthias Guckenberger (UniversityHospital Zurich and University of Zurich, Switzerland); Oliver Riesterer (UniversityHospital Zurich and University of Zurich, Switzerland); Stephanie Tanadini-Lang (UniversityHospital Zurich and University of Zurich, Switzerland)	Session 30	Radiation therapy IV – Tracking	V 104	12.09.2017	08:30
Motion extraction from 4D-MRI for MR-guided particle therapy of pancreatic cancer	Kai Dolde (DKFZ, Germany); Florian Maier (DKFZ, Germany); Patrick Naumann (Universitätsklinik, Germany); Regula Gnirs (DKFZ, Germany); Asja Pfaffenberger (DKFZ, Germany); Nami Saito (DKFZ, Germany; Universitätsklinik, Germany)	Session 30	Radiation therapy IV – Tracking	V 105	12.09.2017	08:30
Monte Carlo framework for the evaluation of interplay effects between dose application and respiratory motion	Asmus von Münchow (LMU Munich, Germany; LMU Munich, Germany); Katrin Straub (LMU Munich, Germany); Jan Hofmaier (LMU Munich, Germany; LMU Munich, Germany); Philipp Freislederer (LMU Munich, Germany); Christian Heinz (LMU Munich, Germany); Michael Reiner (LMU Munich, Germany); Christian Thieke (LMU Munich, Germany); Matthias Söhn (LMU Munich, Germany); Markus Alber (Heidelberg University Hospital, Germany); Ralf Floca (German Cancer Research Center (DKFZ), Germany; National Center for Radiation Research in Oncology (NCRO), Germany); Claus Belka (LMU Munich, Germany); Katia Parodi (LMU Munich, Germany); Florian Kamp (LMU Munich, Germany)	Session 30	Radiation therapy IV – Tracking	V 106	12.09.2017	08:30
Magnetic-field measurement and simulation of a field-free line magnetic-particle scanner	Jan Stelzner (Universität zu Lübeck, Germany); Thorsten M. Buzug (Universität zu Lübeck, Germany)	Session 31	Imaging and image processing III – Nanoparticle imaging and MRI	V 107	12.09.2017	08:30
Transportable magnetorelaxometry device for quantification and characterization of magnetic nanoparticles	Patricia Radon (Physikalisch-Technische Bundesanstalt, Germany); Maik Liebl (Physikalisch-Technische Bundesanstalt, Germany); Dirk Gutkelch (Physikalisch-Technische Bundesanstalt, Germany); Frank Wiekhorst (Physikalisch-Technische Bundesanstalt, Germany)	Session 31	Imaging and image processing III – Nanoparticle imaging and MRI	V 108	12.09.2017	08:30
Magnetic resonance imaging versus histology: Do they really measure the same?	Cindy Elschner (Leibniz-Institut für Polymerforschung Dresden e.V., Germany); Paula Korn (Universitätsklinikum »Carl Gustav Carus«,); Maria Hauptstock (Universitätsklinikum »Carl Gustav Carus«,); Matthias C. Schulz (Universitätsklinikum »Carl Gustav Carus«,); Ursula Range (Universitätsklinikum »Carl Gustav Carus«, Germany); Ulrich Scheler (Leibniz-Institut für Polymerforschung Dresden e.V., Germany)	Session 31	Imaging and image processing III – Nanoparticle imaging and MRI	V 109	12.09.2017	08:30
Organs contours by equipotential lines and adjustment to edges in CT images	Janine Becker (Helmholtz Zentrum München, Germany); Oleg Tischenko (Helmholtz Zentrum München, Germany); Mattia Fedrigo (Helmholtz Zentrum München, Germany)	Session 31	Imaging and image processing III – Nanoparticle imaging and MRI	V 112	12.09.2017	08:30
Contactless measurement of the arterial oxygen saturation	Christian Schiffer (Hochschule Trier, Germany); Andreas Diewald (Hochschule Trier, Germany); René Thull (Hochschule Trier, Germany)	Session 32	Medical measuring techniques II	V 114	12.09.2017	08:30

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Handheld endoscopic device for in vivo morphological imaging of the human oral mucosa by optical coherence tomography	Julia Walther (TU Dresden, Germany; TU Dresden, Germany); Christian Schnabel (TU Dresden, Germany); Nadja Ebert (TU Dresden, Germany); Michael Baumann (TU Dresden, Germany); Edmund Koch (TU Dresden, Germany)	Session 32	Medical measuring techniques II	V 115	12.09.2017	08:30
Process improvement of locking intramedullary nails	Sebastian Waltehr (ICM-Institut Chemnitzer Maschinen- und Anlagenbau e.V., Germany); Andreas Grundmann (ICM-Institut Chemnitzer Maschinen- und Anlagenbau e.V., Germany); Jens Biedermann (Medizin & Service GmbH, Germany); Jens Wutzler (Klinikum Chemnitz gGmbH, Germany)	Session 32	Medical measuring techniques II	V 116	12.09.2017	08:30
Evoked potentials from transcutaneous spinal cord stimulation	Thordur Helgason (Reykjavik University / Landspítali Uni Krankenh, Iceland); Guðbjörg Ludvígsdóttir (Landspítali - Uni Hospital, Iceland); Bragi Arnason (Reykjavik University / Landspítali Uni Krankenh, Iceland); Vilborg Guðmundsdóttir (Landspítali - Uni Hospital, Iceland); Gígja Magnúsdóttir (Landspítali - Uni Hospital, Iceland); Jose Luis Vargas Luna (Medical University of Vienna, Austria); Matthias Krenn (Medical University of Vienna, Austria); Winfried Mayr (Medical University of Vienna, Austria)	Session 32	Medical measuring techniques II	V 117	12.09.2017	08:30
Realization and testing of a 3D electrode array for measuring electric potential differences in a volume conductor	René Machts (Technische Universität Ilmenau, Germany); Alexander Hunold (Technische Universität Ilmenau, Germany); Jens Hauelsen (Technische Universität Ilmenau, Germany)	Session 32	Medical measuring techniques II	V 118	12.09.2017	08:30
Individualized design of fluidically actuated cochlear implants	Silke Hügl (Medizinische Hochschule Hannover, Germany); Lena Zentner (Ilmenau University of Technology, Germany); Stefan Griebel (Ilmenau University of Technology, Germany); Omid Majdani (Medizinische Hochschule Hannover, Germany); Medizinische Hochschule Hannover, Germany); Thomas Lenarz (Medizinische Hochschule Hannover, Germany; Medizinische Hochschule Hannover, Germany); Thomas S. Rau (Medizinische Hochschule Hannover, Germany)	Session 33	Modelling and simulation II	V 119	12.09.2017	08:30
Comparison between intraoperative and chronic deep brain stimulation	Dorian Vogel (Fachhochschule Nordwestschweiz, Switzerland); Fabiola Alonso (University, Sweden); Karin Wårdell (University, Sweden); Simone Hemm (Fachhochschule Nordwestschweiz, Switzerland)	Session 33	Modelling and simulation II	V 120	12.09.2017	08:30
Simulation of light propagation in human skin and skull for the development of sensor system to measure the cerebral oxygen saturation non-invasively	Marian Rabe (Universität Rostock, Germany); Ulrich Timm (Universität Rostock, Germany); Jens Kraitl (Universität Rostock, Germany); Hartmut Ewald (Universität Rostock, Germany)	Session 33	Modelling and simulation II	V 121	12.09.2017	08:30
The DAAD Pagel Project "Supporting Medical Physics Education in Bangladesh"	Hensley Frank (Ruprecht Karls Universität, Germany); Volker Steil (Universitätsklinikum, Germany); Hasin Anupama Azhari (Gono Bishwabidyalay (University), Bangladesh); Flavia Molina (Universitätsklinikum, Germany); Golam Abu Zakaria (Klinikum Oberberg, Germany)	Session 34	Medical physics and biomedical engineering in the developing countries – Education and profession	FS 48	12.09.2017	08:30
Cooperation in medical physics between Heidelberg University in Germany and Gono University in Bangladesh	Golam Abu Zakaria (Gummersach Hospital, Germany; Gono Bishwabidyalay (University), Bangladesh); Hasin Anupama Azhari (Gono Bishwabidyalay (University), Bangladesh); Volker Steil (Heidelberg University, Germany); Frank Hensley (Heidelberg University, Germany); Renate Walter (Klinikum Augsburg, Germany)	Session 34	Medical physics and biomedical engineering in the developing countries – Education and profession	FS 50	12.09.2017	08:30
Gesundheitswesen und medizinische Physik in Vietnam	Ulrich Wolf (Universitätsklinikum Leipzig, Germany)	Session 34	Medical physics and biomedical engineering in the developing countries – Education and profession	FS 51	12.09.2017	08:30
Medizinische Physik in Katar	Kai Schubert (Universitätsklinikum Heidelberg, Germany)	Session 34	Medical physics and biomedical engineering in the developing countries – Education and profession	FS 52	12.09.2017	08:30
MephidA e.V., enhancing cancer care in low-resource countries	Ndimofor Chofo (Strahlentherapie Leer, Germany); Zanzem Atem Tung (Zentrum für Strahlentherapie und Radioonkologie, Germany); Pierre Bopda (AGAPLESION DIAKONIEKLINIKUM ROTENBURG gemeinnützige GmbH, Germany); Yao Thierry Joël Kra (Medizinisches Versorgungszentrum Lörrach, Germany); Rebecca Bücken (FUS-Bottrop, Germany); ERNEST Okonkwo (Ortenau Klinikum Offenburg-Gengenbach, Germany)	Session 34	Medical physics and biomedical engineering in the developing countries – Education and profession	FS 53	12.09.2017	08:30
Experiences with installation, maintenance and expansion of a radio oncology department in Ghana (The Sweden Ghana Medical Centre - SGMC)	Bernhard Schiestl (Univ. Klinik Innsbruck, Austria)	Session 34	Medical physics and biomedical engineering in the developing countries – Education and profession	FS 54	12.09.2017	08:30
Presentation of case studies for CT-protocol optimization.	Bernhard Renger (Inst. f. Radiologie /TU-München, Germany)	Session 35	CT-optimisation II	FS 55	12.09.2017	08:30
Discussion of the case studies	Martin Fiebich (Technische Hochschule Mittelhessen, Germany)	Session 35	CT-optimisation II	FS 56	12.09.2017	08:30
Proposal for Solutions.	Georg Stamm (Univertätsmedizin Göttingen, Georg-August-Universität, Germany)	Session 35	CT-optimisation II	FS 57	12.09.2017	08:30

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Status, limitations, and perspectives of current applications of pre-treatment computed tomography in radiation oncology	Steffen Greilich (Heidelberg Institute of Radiation Oncology (HIRO), Germany; German Cancer Research Center (DKFZ), Germany); Christian Richter (OncoRay - National Center for Radiation Research in Oncology, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Germany)	Session 36	High-precision radiotherapy – Do we need better pre-treatment CT imaging?	FS 58	12.09.2017	08:30
Dual-energy CT for photon therapy – benefits and limitations	Christian Möhler (German Cancer Research Center (DKFZ), Germany; Heidelberg Institute of Radiation Oncology (HIRO), Germany); Patrick Wohlfahrt (OncoRay - National Center for Radiation Research in Oncology, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Germany); Christian Richter (OncoRay - National Center for Radiation Research in Oncology, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Germany; Department of Radiotherapy and Radiation Oncology, Germany; German Cancer Consortium (DKTK), Germany); Steffen Greilich (German Cancer Research Center (DKFZ), Germany; Heidelberg Institute of Radiation Oncology (HIRO), Germany)	Session 36	High-precision radiotherapy – Do we need better pre-treatment CT imaging?	FS 59	12.09.2017	08:30
Dual-energy CT for particle therapy – benefits and limitations	Patrick Wohlfahrt (OncoRay - National Center for Radiation Research in Oncology, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Germany); Christian Möhler (German Cancer Research Center (DKFZ), Germany; Heidelberg Institute of Radiation Oncology (HIRO), Germany); Steffen Greilich (German Cancer Research Center (DKFZ), Germany; Heidelberg Institute of Radiation Oncology (HIRO), Germany); Christian Richter (OncoRay - National Center for Radiation Research in Oncology, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Germany; Department of Radiotherapy and Radiation Oncology, Germany; German Cancer Consortium (DKTK), Germany)	Session 36	High-precision radiotherapy – Do we need better pre-treatment CT imaging?	FS 60	12.09.2017	08:30
Radiomics-prediction of patient-specific outcome using pre-treatment CT imaging	Alex Zwanenburg (National Center for Tumor Diseases, partner site Dresden, Germany; OncoRay - National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Helmholtz-Zentrum Dresden-Rossendorf, Germany; German Cancer Research Center (DKFZ), Germany)	Session 36	High-precision radiotherapy – Do we need better pre-treatment CT imaging?	FS 61	12.09.2017	08:30
CT-radiomics to assess biological and functional tumor properties	Daniela Thorwarth (Eberhard Karls Universität Tübingen, Germany); Jairo Socarras Fernandez (Eberhard Karls Universität Tübingen, Germany)	Session 36	High-precision radiotherapy – Do we need better pre-treatment CT imaging?	FS 62	12.09.2017	08:30
Do we need improved (dual-energy) CT imaging?	Esther Troost (Universitätsklinikum Carl Gustav Carus, Germany)	Session 36	High-precision radiotherapy – Do we need better pre-treatment CT imaging?	FS 63	12.09.2017	08:30
Towards alanine/ESR as a secondary standard for dosimetry in magnetic fields	Raya Roshana Gallas (Physikalisch-Technische Bundesanstalt (PTB), Germany); Thomas Hackel (Physikalisch-Technische Bundesanstalt (PTB), Germany); Ariane Fillmer (Physikalisch-Technische Bundesanstalt (PTB), Germany); Ralf-Peter Kapsch (Physikalisch-Technische Bundesanstalt (PTB), Germany)	Session 37	Young investigator forum	V 124	12.09.2017	10:30
Calorimetric determination of the kQ factor – Towards high precision dosimetry of clinical carbon ion beams	Julia-Maria Osinga-Blättermann (Physikalisch-Technische Bundesanstalt (PTB), Germany; Deutsches Krebsforschungszentrum (DKFZ), Germany); Ulrike Ankerhold (Physikalisch-Technische Bundesanstalt (PTB), Germany); Stephan Brons (Heidelberger Ionenstrahl-Therapiezentrum (HIT), Germany); Steffen Greilich (Deutsches Krebsforschungszentrum (DKFZ), Germany; National Center for Radiation Research in Oncology (NCRO), Heidelberg Institute for Radiation Oncology (HIRO), Germany); Oliver Jäkel (Heidelberger Ionenstrahl-Therapiezentrum (HIT), Germany; Deutsches Krebsforschungszentrum (DKFZ), Germany); Achim Krauss (Physikalisch-Technische Bundesanstalt (PTB), Germany)	Session 37	Young investigator forum	V 125	12.09.2017	10:30
Determination of RBE-weighted dose-response curves for MRI-detected radiation-induced temporal lobe reactions in patients: comparison between proton and carbon ion irradiations	Clarissa Gillmann (University Hospital Erlangen, Germany); Tony Lomax (Paul Scherrer Institute, Switzerland); Damien Weber (Paul Scherrer Institute, Switzerland); Oliver Jäkel (German Cancer Research Center, Germany); Christian Karger (German Cancer Research Center, Germany)	Session 37	Young investigator forum	V 127	12.09.2017	10:30
A novel treatment approach after glioblastoma resection: microcontroller-based surgical implant with light-emitting diodes for postoperative irradiation of glioblastoma cells	Nicolas Bader (Hochschule Ulm, Germany); Felix Capanni (Hochschule Ulm, Germany); Marc-Eric Halatsch (Universität Ulm, Germany); Richard E. Kast (IIAIGC Study Center, United States); Christian Peschmann (Universität Ulm, Germany)	Session 38	Organ and patient support systems II	V 129	12.09.2017	10:30

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Low energy electron beam sterilization for novel interactive implants and their components	Jessy Schönfelder (Fraunhofer Institute for Electron Beam and Plasma Technology FEP, Germany); Javier Portillo (Fraunhofer Institute for Electron Beam and Plasma Technology FEP, Germany); Gaby Gotzmann (Fraunhofer Institute for Electron Beam and Plasma Technology FEP, Germany); Marleen Dietze (Fraunhofer Institute for Electron Beam and Plasma Technology FEP, Germany); Frank-Holm Rögner (Fraunhofer Institute for Electron Beam and Plasma Technology FEP, Germany)	Session 38	Organ and patient support systems II	V 132	12.09.2017	10:30
Development of a controlled-occluding membrane as a stent graft component for spinal cord ischaemia prophylaxis	Alexander Loewen (Institut für Textiltechnik der RWTH Aachen, Germany); Alexander Gombert (Klinik für Gefäßchirurgie der Uniklinik RWTH Aachen, Germany); Larissa Hussmann (DWI – Leibniz-Institut für Interaktive Materialien e.V., Germany); Drosos Kotelis (Klinik für Gefäßchirurgie der Uniklinik RWTH Aachen, Germany); Alexander Töpel (DWI – Leibniz-Institut für Interaktive Materialien e.V., Germany); Sabrina Thies (DWI – Leibniz-Institut für Interaktive Materialien e.V., Germany); Valentine Gesché (Institut für Textiltechnik der RWTH Aachen, Germany); Andrij Pich (DWI – Leibniz-Institut für Interaktive Materialien e.V., Germany); Michael Jacobs (Klinik für Gefäßchirurgie der Uniklinik RWTH Aachen, Germany); Thomas Gries (Institut für Textiltechnik der RWTH Aachen, Germany); Stefan Jockenhoevel (Institut für Textiltechnik der RWTH Aachen, Germany); Institut für Angewandte Medizintechnik, Helmholtz-Institut der RWTH Aachen, Germany)	Session 38	Organ and patient support systems II	V 133	12.09.2017	10:30
Modelling of NTCP for acute side effects in patients with prostate cancer or brain tumours receiving proton therapy	Almut Dutz (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden; Helmholtz-Zentrum Dresden - Rossendorf, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Germany; German Cancer Consortium (DKTK), partner site Dresden, and German Cancer Research Center (DKFZ), Germany); Linda Agolli (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden; Helmholtz-Zentrum Dresden - Rossendorf, Germany; Department of Radiotherapy and Radiation Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Germany); Esther G.C. Troost (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden; Helmholtz-Zentrum Dresden - Rossendorf, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Germany; German Cancer Consortium (DKTK), partner site Dresden, and German Cancer Research Center (DKFZ), Germany; Department of Radiotherapy and Radiation Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Germany; National Center for Tumor Diseases (NCT), partner site Dresden, Germany); Mechthild Krause (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden; Helmholtz-Zentrum Dresden - Rossendorf, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Germany; German Cancer Consortium (DKTK), partner site Dresden, and German Cancer Research Center (DKFZ), Germany; Department of Radiotherapy and Radiation Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Germany; National Center for Tumor Diseases (NCT), partner site Dresden, Germany); Michael Baumann (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden; Helmholtz-Zentrum Dresden - Rossendorf, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Germany; German Cancer Consortium (DKTK), partner site Dresden, and German Cancer Research Center (DKFZ), Germany; Department of Radiotherapy and Radiation Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Germany; National Center for Tumor Diseases (NCT), partner site Dresden, Germany); Armin Lühr (OncoRay – National Center for	Session 39	Modelling and simulation III	V 134	12.09.2017	10:30
Can radiomics of the tumor metabolism predict local recurrences in head and neck squamous cell carcinoma?	Stephanie Tanadini-Lang (University of Zurich, Switzerland); Marta Bogowicz (University of Zurich, Switzerland); Luisa Sabrina Stark (University of Zurich, Switzerland); Gabriela Studer (University of Zurich, Switzerland); Jan Unkelbach (University of Zurich, Switzerland); Matthias Guckenberger (University of Zurich, Switzerland); Oliver Riesterer (University of Zurich, Switzerland)	Session 39	Modelling and simulation III	V 135	12.09.2017	10:30

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Novel approach for integrating motion variability into 4D-dose reconstruction for extracranial SBRT	Thilo Sothmann (Universitätsklinikum Hamburg-Eppendorf, Germany; Universitätsklinikum Hamburg-Eppendorf, Germany); Tobias Gauer (Universitätsklinikum Hamburg-Eppendorf, Germany); Matthias Wilms (Universität zu Lübeck, Germany); René Werner (Universitätsklinikum Hamburg-Eppendorf, Germany)	Session 39	Modelling and simulation III	V 136	12.09.2017	10:30
Process optimization in medical care by technical innovations and digitization	Michael Czaplik (Uniklinik RWTH Aachen, Germany)	Session 40	Trends in patient monitoring and emergency care	FS 64	12.09.2017	10:30
Experience with two measurement modalities to objectify pulse palpation during cardio-pulmonary resuscitation	Jens Mühlsteff (Philips Research Europe, Netherlands); Ralph Wijshoff (Philips Research Europe, Netherlands); Dawn Jorgenson (Philips , United States); Pierre Woerlee (Eindhoven University of Technology, Netherlands); Gerrit Jan Noordergraaf (Elisabeth-Tweesteden Hospital, Netherlands); Lance B. Becker (NSUH - Dept of Emergency Medicine, United States); Joshua W. Lampe (NSUH - Dept of Emergency Medicine, United States); Pia Hubner (Medical University, Austria); Fritz Sterz (Medical University, Austria); James K. Russell (Russell Biomedical Research Consulting, United States); Christian Meyer (UKE Eppendorf University Hospital Hamburg, Germany)	Session 40	Trends in patient monitoring and emergency care	FS 65	12.09.2017	10:30
Cardiac support in emergency situations	Katrin Lunze (Abiomed Europe GmbH, Germany); Christoph Nix (Abiomed Europe GmbH, Germany); Thorsten Sieß (Abiomed Europe GmbH, Germany)	Session 40	Trends in patient monitoring and emergency care	FS 67	12.09.2017	10:30
Integrating Clinical Demands into Developing and Testing of Novel Devices	Michael Buschermöhle (KIZMO GmbH, Germany); Markus Meis (KIZMO GmbH, Germany)	Session 41	Innovation management in medical engineering	FS 70	12.09.2017	10:30
Cooperative patent classification as a mean of validation for support vector machine learning: case study in biomedical emerging fields of technology	Nader Hamadeh (RWTH Aachen University, Germany); Mark Bukowski (RWTH Aachen University, Germany); Thomas Schmitz-Rode (RWTH Aachen University, Germany); Robert Farkas (RWTH Aachen University, Germany)	Session 41	Innovation management in medical engineering	FS 71	12.09.2017	10:30
Opportunities and threats in accelerating the innovation transfer in medical engineering	Volker Wiechmann (medways e.V., Germany)	Session 41	Innovation management in medical engineering	FS 72	12.09.2017	10:30
User interaction torque monitoring of a 7-DOF upper-limb exoskeleton with IMU-based motion input	Markus Hessinger (Technische Universität Darmstadt, Germany); Arthur Buchta (Technische Universität Darmstadt, Germany); Eike Christmann (Technische Universität Darmstadt, Germany); Roland Werthschützky (Technische Universität Darmstadt, Germany); Mario Kupnik (Technische Universität Darmstadt, Germany)	Session 42	Human-machine-interaction in medicine – New approaches and current challenges	FS 73	12.09.2017	10:30
Situation detection in a powered lower limb orthosis	Jürgen Hielscher (Technische Universität Darmstadt, Germany); Sascha Schlemmer (Technische Universität Darmstadt, Germany); Markus Hessinger (Technische Universität Darmstadt, Germany); Christian Hatzfeld (Technische Universität Darmstadt, Germany); Roland Werthschützky (Technische Universität Darmstadt, Germany); Mario Kupnik (Technische Universität Darmstadt, Germany)	Session 42	Human-machine-interaction in medicine – New approaches and current challenges	FS 74	12.09.2017	10:30
Haptic assistive systems for precise and gentle interventions	Christian Hatzfeld (TU Darmstadt, Germany); Johannes Bilz (TU Darmstadt, Germany); Carsten Neupert (TU Darmstadt, Germany); Nataliya Stefanova (TU Darmstadt, Germany); Roland Werthschützky (TU Darmstadt, Germany); Mario Kupnik (TU Darmstadt, Germany)	Session 42	Human-machine-interaction in medicine – New approaches and current challenges	FS 75	12.09.2017	10:30
Medical Apps - To be or not to be (a medical device)?	Michael Imhoff (Ruhr-Universität Bochum, Germany)	Session 43	Digital health data for individualised medicine and care	FS 77	12.09.2017	10:30
Digitale Prozessketten in der Medizintechnik	Michael Wehmöller (Fakultät Wirtschaftsingenieurwesen Ostbayerische Technische Hochschule (OTH) , Germany)	Session 43	Digital health data for individualised medicine and care	FS 78	12.09.2017	10:30
EPItect - usage of an in-ear sensor as well as patient data to detect and document epileptic seizure patterns	Salima Houta (Fraunhofer-Institut für Software- und Systemtechnik, Germany)	Session 43	Digital health data for individualised medicine and care	FS 79	12.09.2017	10:30
Using wearables for decentralized individual long-term patient monitoring - a generic gateway architecture for multimodal sensor integration	Thomas Walzer (Hochschule Reutlingen, Germany); Natividad Martinez Madrid (Hochschule Reutlingen, Germany); Nisar P. Malek (Universität Tübingen, Germany); Oliver Burgert (Hochschule Reutlingen, Germany); Christian Thies (Hochschule Reutlingen, Germany)	Session 43	Digital health data for individualised medicine and care	FS 80	12.09.2017	10:30
A system to improve the hand sanitation in clinical environments	Lars Bölecke (Technische Universität Ilmenau, Germany); Johannes Freckmann (Technische Universität Ilmenau, Germany); Daniel Laqua (Technische Universität Ilmenau, Germany); Peter Husar (Technische Universität Ilmenau, Germany)	Poster session 20	User friendliness, risk management and hospital technology	P 193	12.09.2017	15:00
Establishment of a quality control system in diagnostic imaging in Northern Iraq	Robin Etzel (Technische Hochschule Mittelhessen, Germany); Hariwan Abdulkareem Mohammed (University of Duhok, Iraq); Haval Younis Yacooab Aldosky (University of Duhok, Iraq); Martin Fiebich (Technische Hochschule Mittelhessen, Germany)	Poster session 20	User friendliness, risk management and hospital technology	P 194	12.09.2017	15:00

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Risks related to infusion pumps - First steps towards building up a device-specific ontology	Robin Seidel (Bundesinstitut für Arzneimittel und Medizinprodukte, Germany); Katrin Tamm (Bundesinstitut für Arzneimittel und Medizinprodukte, Germany); Ekkehard Stößlein (Bundesinstitut für Arzneimittel und Medizinprodukte, Germany); Wolfgang Lauer (Bundesinstitut für Arzneimittel und Medizinprodukte, Germany)	Poster session 20	User friendliness, risk management and hospital technology	P 195	12.09.2017	15:00
Implementing risk management or safety management in a radiotherapy institution: challenges, ideas and examples for solutions	Daniel Hummel (MVZ des Universitätsklinikums Tübingen, Germany); Michael Bay (MVZ des Universitätsklinikums Tübingen, Germany)	Poster session 20	User friendliness, risk management and hospital technology	P 196	12.09.2017	15:00
The human operator: transfer function of the motor control behavior	Hans Gerisch (Institut für Informationstechnik/ Universität der Bundeswehr München, Germany); Werner Wolf (Institut für Informationstechnik/ Universität der Bundeswehr München, Germany); Gerhard Staude (Institut für Informationstechnik/ Universität der Bundeswehr München, Germany); Andreas Knopp (Institut für Informationstechnik/ Universität der Bundeswehr München, Germany)	Poster session 20	User friendliness, risk management and hospital technology	P 198	12.09.2017	15:00
Probabilistic fibertracking in deep brain stimulation	Mauritius Hoevels (Uniklinik Köln, Germany); Alexandra Hellerbach (Uniklinik Köln, Germany); Andreas Gierich (Uniklinik Köln, Germany); Klaus Luyken (Uniklinik Köln, Germany); Martin Klehr (Uniklinik Köln, Germany); Jochen Wirths (Uniklinik Köln, Germany); Veerle Visser-Vandewalle (Uniklinik Köln, Germany); Harald Treuer (Uniklinik Köln, Germany)	Poster session 21	Imaging and image processing IV	P 200	12.09.2017	15:00
Detection of image plane orientation during two-photon laser scanning microscopy in brain tissue of mice using the geometry of stimulation and recording electrodes	Lisa Grochowski (Trier University of Applied Sciences, Germany); Frank Kirchhoff (University of Saarland, Germany); Klaus Peter Koch (Trier University of Applied Sciences, Germany); Michael Schweigmann (Trier University of Applied Sciences, Germany); University of Saarland, Germany)	Poster session 21	Imaging and image processing IV	P 201	12.09.2017	15:00
A novel algorithm for efficient detection and segmentation of metals for artefact reduction in computed tomography	Alfredo Illanes (Otto von Guericke University, Germany); Shiras Abdurahman (Otto von Guericke University, Germany); Michael Friebe (Otto von Guericke University, Germany)	Poster session 21	Imaging and image processing IV	P 203	12.09.2017	15:00
Interventional limited angle CT concept	Muhammad Usama Iftikhar (Otto-von-Guericke University Magdeburg, Germany); Robert Odenbach (Otto-von-Guericke University Magdeburg, Germany); Shiras Abdurahman (Otto-von-Guericke University Magdeburg, Germany); Alexander van Oepen (Otto-von-Guericke University Magdeburg, Germany); Michael Friebe (Otto-von-Guericke University Magdeburg, Germany)	Poster session 21	Imaging and image processing IV	P 208	12.09.2017	15:00
Quantitative chemical shift spectroscopy (CSI) with respect to B0- and B1-inhomogeneities	Heiner Baier (Universität Halle, Germany); Svatko Zhanna (Universitätsklinikum Halle, Germany); Rolf Peter Spielmann (Universitätsklinikum Halle, Germany); Manfred Knörger (Universitätsklinikum Halle, Germany)	Poster session 21	Imaging and image processing IV	P 209	12.09.2017	15:00
Virtual enhancement of marker X-ray visibility for cerebral stents and flow diverters	Samuel Manthey (Otto von Guericke University Magdeburg, Germany); Hoffmann Thomas (Otto-von-Guericke-Universität Magdeburg, Medizinische Fakultät/Universitätsklinikum A.ö.R. (FME/UKMD) , Germany); Giorgio Cattaneo (Acandis GmbH & Co KG, Germany); Oliver Beuing (Otto-von-Guericke-Universität Magdeburg, Medizinische Fakultät/Universitätsklinikum A.ö.R. (FME/UKMD) , Germany); Bernhard Preim (Otto von Guericke University Magdeburg, Germany); Sylvia Saalfeld (Otto von Guericke University Magdeburg, Germany)	Poster session 22	Imaging and image processing V	P 210	12.09.2017	15:00
Characterization of carious lesions in vitro based on hyperspectral imaging data	Florian Tetschke (Technische Universität Dresden, Germany; Technische Universität Dresden, Germany); Lars Kirsten (Technische Universität Dresden, Germany); Edmund Koch (Technische Universität Dresden, Germany); Gerald Steiner (Technische Universität Dresden, Germany); Christian Hannig (Technische Universität Dresden, Germany)	Poster session 22	Imaging and image processing V	P 212	12.09.2017	15:00
Summarised difference temperature method for evaluating sagittal-symmetrical ROI pairs in medical thermal IR images	Carsten Siewert (University of Veterinary Medicine Hannover, Germany); Astrid Bienert-Zeit (University of Veterinary Medicine Hannover, Germany); Birgit Krogbeumker (Veterinary Medical Practice, Germany); Bernhard Ohnesorge (University of Veterinary Medicine Hannover, Germany); Hermann Seifert (University of Veterinary Medicine Hannover, Germany)	Poster session 22	Imaging and image processing V	P 213	12.09.2017	15:00

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Evaluation of magnetic field interactions, heating and artifacts of a new magnetic, ophthalmic implant at a 3T MRI	Ann-Kathrin Bodenstein (Tierärztliche Hochschule Hannover, Germany); Matthias Lüpke (Tierärztliche Hochschule Hannover, Germany); Christian Seiler (Tierärztliche Hochschule Hannover, Germany); Frank Goblet (Tierärztliche Hochschule Hannover, Germany); Ulf Hinze (Laser Zentrum Hannover e.V., Germany); Boris Chichkov (Laser Zentrum Hannover e.V., Germany); Patrick Wefstaedt (Tierärztliche Hochschule Hannover, Germany); Ingo Nolte (Tierärztliche Hochschule Hannover, Germany); Hermann Seifert (Tierärztliche Hochschule Hannover, Germany)	Poster session 22	Imaging and image processing V	P 214	12.09.2017	15:00
A mobile EIT system for fast image based medical indication	Christian Gibas (Universität Siegen, Germany); Steffen Büchner (Universität Siegen, Germany); Rainer Brück (Universität Siegen, Germany)	Poster session 22	Imaging and image processing V	P 215	12.09.2017	15:00
Muscle oxygenation monitoring using OXY DR2	Redwan Abdo A. Mohammed (Hochschule Wismar, Germany); Christoph Hornberger (Hochschule Wismar, Germany)	Poster session 22	Imaging and image processing V	P 217	12.09.2017	15:00
Online recognition of cortical blood flow by time-resolved thermography in neurosurgery	Juliane Müller (Technische Universität Dresden, Germany); Julia Hollmach (HiperScan GmbH, Germany; Technische Universität Dresden, Germany); Elisa Böhl (Technische Universität Dresden, Germany); Nico Hoffmann (Technische Universität Dresden, Germany); Stephan Sobottka (Technische Universität Dresden, Germany); Matthias Kirsch (Technische Universität Dresden, Germany); Gabriele Schackert (Technische Universität Dresden, Germany); Gerald Steiner (Technische Universität Dresden, Germany); Edmund Koch (Technische Universität Dresden, Germany)	Poster session 22	Imaging and image processing V	P 218	12.09.2017	15:00
Neuroimaging center python pipelines: a web-based image processing framework	Dirk K. Müller (TU-Dresden, Germany); Lukas Reimer (TU-Dresden, Germany); Niklas Förster (TU-Dresden, Germany); Pascal Lehmann (TU-Dresden, Germany); Michael Marxen (TU-Dresden, Germany)	Poster session 22	Imaging and image processing V	P 219	12.09.2017	15:00
Hyperspectral imaging and clinical practice – approach to integrate a new diagnostic tool	Alke Martens (Universität Rostock, IEF, Germany); Nikolaj Troels Graf von Malotky (Universität Rostock, IEF, Germany); Marian Nagorsnick (Universität Rostock, IEF, Germany)	Poster session 22	Imaging and image processing V	P 220	12.09.2017	15:00
Comparison of different methods of size specific dose estimate (SSDE) determination in computed tomography	Helat A. Hussein (University of Duhok, Iraq); Ulf Mäder (Technische Hochschule Mittelhessen, Germany); Martin Fiebich (Technische Hochschule Mittelhessen, Germany)	Poster session 23	Imaging and image processing VI	P 221	12.09.2017	15:00
A novel automatic gauge detection algorithm for the performance test of a CT scanner with Catphan 600 phantom	Zhi Qiao (Institut für Medizintechnik Intelligente Katheter (INKA), Otto-von-Guericke-Universität Magdeburg, Germany, Germany); Alfredo Illanes (Institut für Medizintechnik Intelligente Katheter (INKA), Otto-von-Guericke-Universität Magdeburg, Germany, Germany); Shiras Abdurahman (Institut für Medizintechnik Intelligente Katheter (INKA), Otto-von-Guericke-Universität Magdeburg, Germany, Germany); Michael Friebe (Institut für Medizintechnik Intelligente Katheter (INKA), Otto-von-Guericke-Universität Magdeburg, Germany, Germany)	Poster session 23	Imaging and image processing VI	P 222	12.09.2017	15:00
Implementation of a correction procedure to decrease the effect of PSF-related signal leakage in ²³ Na NMRS	Aaron Globisch (Universität zu Lübeck, Germany); Uwe H. Melchert (Universität zu Lübeck, Germany); Christian Erdmann (Universität zu Lübeck, Germany); Martin Koch (Universität zu Lübeck, Germany)	Poster session 23	Imaging and image processing VI	P 223	12.09.2017	15:00
Submillimetre shifts and their impacts on PET-CT resolution	Stefan Kegel (Deutsches Krebsforschungszentrum, Germany); Charles Majer (Deutsches Krebsforschungszentrum, Germany)	Poster session 23	Imaging and image processing VI	P 224	12.09.2017	15:00
Optimization of X-Ray dark-field microCT and application in a murine lung model	Rico Burkhardt (TUM, Klinikum rechts der Isar, Germany; Technical University Munich (TUM), Germany; Helmholtz Zentrum, Germany); Stephan Umkehrer (Technical University Munich (TUM), Germany; Technical University Munich (TUM), Germany); Max von Teuffenbach (Technical University Munich (TUM), Germany; Technical University Munich (TUM), Germany); Karin Burger (TUM, Klinikum rechts der Isar, Germany; Technical University Munich (TUM), Germany; Technical University Munich (TUM), Germany); Julia Herzen (Technical University Munich (TUM), Germany; Technical University Munich (TUM), Germany); Peter Noel (Technical University Munich (TUM), Germany; TUM, Klinikum rechts der Isar, Germany); Stephanie E. Combs (TUM, Klinikum rechts der Isar, Germany; Helmholtz Zentrum, Germany; Deutsches Konsortium für translationale Krebsforschung (DKTK), Germany); Franz Pfeiffer (Technical University Munich (TUM), Germany; Technical University Munich (TUM), Germany); Jan J. Wilkens (TUM, Klinikum rechts der Isar, Germany; Helmholtz Zentrum, Germany; Technical University Munich (TUM), Germany; Technical University Munich (TUM), Germany)	Poster session 23	Imaging and image processing VI	P 226	12.09.2017	15:00

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Characterization of cerebral tissue with thermography and white light microscopy during neurosurgery	Christian Schnabel (TU Dresden, Faculty of Medicine CGC, Germany); Elisa Böhl (TU Dresden, Faculty of Medicine CGC, Germany); Juliane Müller (TU Dresden, Faculty of Medicine CGC, Germany); Nico Hoffmann (TU Dresden, Germany); Gerald Steiner (TU Dresden, Faculty of Medicine CGC, Germany); Matthias Kirsch (TU Dresden, Faculty of Medicine CGC, Germany); Gabriele Schackert (TU Dresden, Faculty of Medicine CGC, Germany); Edmund Koch (TU Dresden, Faculty of Medicine CGC, Germany)	Poster session 23	Imaging and image processing VI	P 227	12.09.2017	15:00
A framework for intraoperative visualization of spatiotemporal alterations in cortical optical properties induced by direct electrical stimulation	Martin Oelschlägel (Technische Universität Dresden, Germany); Stephan B. Sobottka (Universitätsklinikum Carl Gustav Carus, Germany); Matthias Kirsch (Universitätsklinikum Carl Gustav Carus, Germany); Gabriele Schackert (Universitätsklinikum Carl Gustav Carus, Germany); Ute Morgenstern (Technische Universität Dresden, Germany)	Poster session 23	Imaging and image processing VI	P 228	12.09.2017	15:00
An active shape model for automatic segmentation of the knee bones	Alex Ringenbach (FHNW-HLS , Switzerland)	Poster session 23	Imaging and image processing VI	P 230	12.09.2017	15:00
Single plane compton imaging – A novel concept for radionuclide imaging	Toni Kögler (Helmholtz-Zentrum Dresden - Rossendorf, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Germany; OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Helmholtz-Zentrum Dresden - Rossendorf, Germany); Boyana Deneva (Helmholtz-Zentrum Dresden - Rossendorf, Germany); Katja Roemer (Helmholtz-Zentrum Dresden - Rossendorf, Germany); Theresa Werner (Helmholtz-Zentrum Dresden - Rossendorf, Germany; OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Helmholtz-Zentrum Dresden - Rossendorf, Germany); Wolfgang Enghardt (Helmholtz-Zentrum Dresden - Rossendorf, Germany; OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Helmholtz-Zentrum Dresden - Rossendorf, Germany); German Cancer Consortium (DKTK), partner site Dresden, and German Cancer Research Center (DKFZ), Heidelberg, Germany); Guntram Pausch (Helmholtz-Zentrum Dresden - Rossendorf, Germany; OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Helmholtz-Zentrum Dresden - Rossendorf, Germany)	Poster session 23	Imaging and image processing VI	P 231	12.09.2017	15:00
Ion radiography with proton, helium- and carbon ion beams	Benedikt Kopp (Ludwig-Maximilians-Universität München, Germany; Heidelberg University Hospital, Germany); Lorena Magallanes (Ludwig-Maximilians-Universität München, Germany; Heidelberg University Hospital, Germany); Sebastian Meyer (Ludwig-Maximilians-Universität München, Germany); Chiara Gianoli (Ludwig-Maximilians-Universität München, Germany); Thomas Tessonnier (Ludwig-Maximilians-Universität München, Germany; Heidelberg University Hospital, Germany); Maximilian Göppel (Ludwig-Maximilians-Universität München, Germany); Stephan Brons (Heidelberg Ion Therapy Centre, Germany); Bernd Voss (GSI Helmholtz Centre for Heavy Ion Research, Germany); Ralf Panse (Heidelberg Ion Therapy Centre, Germany); Katia Parodi (Ludwig-Maximilians-Universität München, Germany; Heidelberg University Hospital, Germany)	Poster session 23	Imaging and image processing VI	P 232	12.09.2017	15:00
Concept of a multilayer biopsy needle for magnetic resonance imaging interventions	Marwah ALmaatoq (Otto- von-Guericke University Magdeburg, Germany); Axel Boese (Otto- von-Guericke University Magdeburg, Germany); Michael Friebe (Otto- von-Guericke University Magdeburg, Germany)	Poster session 24	Image guided, robotic and miniaturised systems for intervention and therapy III	P 233	12.09.2017	15:00
Integration and evaluation of 6 DoF input devices for computer-assisted planning in maxillofacial surgery	Urs Eisenmann (Institut für Medizinische Biometrie und Informatik, Germany); Konstantin Gegier (Institut für Medizinische Biometrie und Informatik, Germany); Igor Nova (Institut für Medizinische Biometrie und Informatik, Germany); Sebastian Kallus (Institut für Medizinische Biometrie und Informatik, Germany); Moritz Berger (Universitätsklinikum Heidelberg, Germany); Hartmut Dickhaus (Institut für Medizinische Biometrie und Informatik, Germany)	Poster session 24	Image guided, robotic and miniaturised systems for intervention and therapy III	P 234	12.09.2017	15:00
Modular three-dimensional magnetic camera dedicated to magnetic manipulation instrumentation systems	Joris Pascal (Fachhochschule Nordwestschweiz FHNW, Switzerland); Dorian Vogel (Fachhochschule Nordwestschweiz FHNW, Switzerland); Sven Knecht (University Hospital Basel, Switzerland); Christophe Chautems (ETH Zürich, Switzerland)	Poster session 24	Image guided, robotic and miniaturised systems for intervention and therapy III	P 235	12.09.2017	15:00

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Microsystembased functionalization of sensor catheters	David Wagner (Institut für Mikro- und Sensorsysteme - Universität Magdeburg, Germany); Kai Pitschmann (Institut für Mikro- und Sensorsysteme - Universität Magdeburg, Germany); Ulrich Schumann (Institut für Informations-und Kommunikationstechnik - Universität Magdeburg, Germany); Sebastian Freidank (Institut für Mikro- und Sensorsysteme - Universität Magdeburg, Germany); Bertram Schmidt (Institut für Mikro- und Sensorsysteme - Universität Magdeburg, Germany); Markus Detert (Institut für Mikro- und Sensorsysteme - Universität Magdeburg, Germany)	Poster session 24	Image guided, robotic and miniaturised systems for intervention and therapy III	P 236	12.09.2017	15:00
Packaging of μ LEDs to flexible polyimide substrates	Martin Deckert (Otto von Guericke University Magdeburg, Germany); Michael Thomas Lippert (Leibniz Institute for Neurobiology, Germany); Jakub Krzemiński (Warsaw University of Technology, Poland); Kentaro Takagaki (Leibniz Institute for Neurobiology, Germany); Frank W. Ohl (Leibniz Institute for Neurobiology, Germany); Bertram Schmidt (Otto von Guericke University Magdeburg, Germany); Markus Detert (Otto von Guericke University Magdeburg, Germany)	Poster session 24	Image guided, robotic and miniaturised systems for intervention and therapy III	P 237	12.09.2017	15:00
The development of an expert system as a virtual physiotherapist in the domestic environment	Paula Krüger (TU Dresden, Germany); Andreas Heinke (TU Dresden, Germany); Zbigniew Śliwiński (Physiotherapy Centre , Poland); Hagen Malberg (TU Dresden, Germany); Grzegorz Śliwiński (TU Dresden, Germany)	Poster session 24	Image guided, robotic and miniaturised systems for intervention and therapy III	P 238	12.09.2017	15:00
Instrument calibration for a camera based surgical navigation system	Manuel Katanacho (Fraunhofer Institute for Production Systems and Design Technology IPK, Germany); Oliver Krumpek (Fraunhofer Institute for Production Systems and Design Technology IPK, Germany); Eckart Uhlmann (Fraunhofer Institute for Production Systems and Design Technology IPK, Germany); Fraunhofer Institute for Production Systems and Design Technology IPK, Germany); Steffen Melnik (Fraunhofer Institute for Production Systems and Design Technology IPK, Germany)	Poster session 24	Image guided, robotic and miniaturised systems for intervention and therapy III	P 240	12.09.2017	15:00
3D packaging for an implantable hemodynamic control system	Tim Schröder (Fraunhofer ENAS, Germany); Mario Baum (Fraunhofer ENAS, Germany); Dirk Wunsch (Fraunhofer ENAS, Germany); Maik Wiemer (Fraunhofer ENAS, Germany); Thomas Otto (Fraunhofer ENAS, Germany)	Poster session 25	Biosignal processing and monitoring III	P 241	12.09.2017	15:00
An auscultatory non invasive blood pressure equivalent without PEP?	Simon Hofmann (University of Applied Sciences Giessen, Germany); Keywan Sohrabi (University of Applied Sciences Giessen, Germany); Christian Igler (Facharztpraxis für Innere Medizin, Germany); Nils Gilg (University of Applied Sciences Giessen, Germany); Andreas Weissflog (Thora Tech GmbH, Germany); Volker Gross (University of Applied Sciences Giessen, Germany)	Poster session 25	Biosignal processing and monitoring III	P 243	12.09.2017	15:00
A chip-based biosensor for the detection of glycosylphosphatidylinositol-anchored proteins in serum as stress biomarkers	Günter Müller (Helmholtz Zentrum München, Germany); Andreas Herling (Sanofi Germany GmbH, Germany); Matthias Tschöp (Helmholtz Zentrum München, Germany)	Poster session 25	Biosignal processing and monitoring III	P 244	12.09.2017	15:00
Impaired autonomic regulation in ideopathic sudden sensorineural hearing loss patients - Does it depend on hypertension?	Claudia Fischer (Ernst-Abbe-Hochschule Jena, Germany); Julia Ritter (University Hospital Jena, Germany); Orlando Guntinas-Lichius (University Hospital Jena, Germany); Andreas Voss (Ernst-Abbe-Hochschule Jena, Germany)	Poster session 25	Biosignal processing and monitoring III	P 245	12.09.2017	15:00
Correlation of Mayer waves in arterial blood pressure and retinal vessel diameter	Steffen Rieger (Technische Universität Ilmenau, Germany); L. Lüken (Technische Universität Ilmenau, Germany); Daniel Baumgarten (University for Health Sciences, Medical Informatics and Technology (UMIT), Austria); Sascha Klee (Technische Universität Ilmenau, Germany); Silvio Dutz (Technische Universität Ilmenau, Germany)	Poster session 25	Biosignal processing and monitoring III	P 246	12.09.2017	15:00
Empirical mode decomposition and time varying modelling for carotid audio signal analysis	Alfredo Illanes (Otto von Guericke University, Germany); Iván Maldonado (Otto von Guericke University, Germany); Axel Boese (Otto von Guericke University, Germany); Michael Friebe (Otto von Guericke University, Germany)	Poster session 25	Biosignal processing and monitoring III	P 247	12.09.2017	15:00
Nonparametric modeling of quasi-periodic signals: application to esophageal pressure filtering	Jan Graßhoff (Universität zu Lübeck, Germany); Georg Männel (Universität zu Lübeck, Germany); Philipp Rostalski (Universität zu Lübeck, Germany)	Poster session 25	Biosignal processing and monitoring III	P 248	12.09.2017	15:00
Using functio-anatomical prior knowledge in linear EEG/MEG source reconstruction methods	Mirco Fuchs (HTWK Leipzig, University of Applied Sciences, Germany); Max Planck Institute for Human Cognitive and Brain Sciences, Germany); Burkhard Maess (Max Planck Institute for Human Cognitive and Brain Sciences, Germany); Thomas Knösche (Max Planck Institute for Human Cognitive and Brain Sciences, Germany)	Poster session 25	Biosignal processing and monitoring III	P 249	12.09.2017	15:00
A wearable chest-strap ECG for real-time data processing	Aulia Arif Iskandar (Universität Würzburg, Germany); Wolfram Voelker (Universitätsklinikum Würzburg, Germany); Reiner Kolla (Universität Würzburg, Germany); Klaus Schilling (Universität Würzburg, Germany)	Poster session 26	Biosignal processing and monitoring IV	P 253	12.09.2017	15:00
Long-term signal prediction in a level-crossing behaviour analysis for seizure prediction in epilepsy	Katja Mühlberg (Institut für Grundlagen der Elektrotechnik und Elektronik, Germany); Ronald Tetzlaff (Institut für Grundlagen der Elektrotechnik und Elektronik, Germany)	Poster session 26	Biosignal processing and monitoring IV	P 255	12.09.2017	15:00

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Spectral analysis of signal averaging electrocardiography in atrial and ventricular tachyarrhythmias	Jonas Tumampos (Hochschule Offenburg, Germany); Matthias Heinke (Hochschule Offenburg, Germany); Johannes Hörth (Hochschule Offenburg, Germany); Carsten Bienek (Schwarzer Cardiotek GmbH, Germany)	Poster session 26	Biosignal processing and monitoring IV	P 257	12.09.2017	15:00
PPG imaging: investigating skin inhomogeneity using hyperspectral imaging and principal component analysis	Nicolai Spicher (University of Applied Sciences and Arts Dortmund, Germany); Fatih Tanriverdi (University of Applied Sciences and Arts Dortmund, Germany); Jörg Thiem (University of Applied Sciences and Arts Dortmund, Germany); Markus Kukuk (University of Applied Sciences and Arts Dortmund, Germany)	Poster session 26	Biosignal processing and monitoring IV	P 258	12.09.2017	15:00
Detector response in the build-up region of small 6 MV photon fields	Barbara Herzog (Universitätsklinikum Würzburg, Germany); Sonja Wegener (Universitätsklinikum Würzburg, Germany); Otto A. Sauer (Universitätsklinikum Würzburg, Germany)	Poster session 27	Dosimetry, radiation protection and radiation biology III	P 259	12.09.2017	15:00
Evaluation of the ArcCheck 3DVH-module	Heidi Spickermann (Universitätsklinikum Würzburg, Germany); Sonja Wegener (Universitätsklinikum Würzburg, Germany); Otto A. Sauer (Universitätsklinikum Würzburg, Germany)	Poster session 27	Dosimetry, radiation protection and radiation biology III	P 260	12.09.2017	15:00
Dosimetric calibration of an electronic portal imaging device (EPID)	Thilo Seliger (Philipps-University Marburg, Germany); Damian Czarnecki (University of Applied Sciences, Germany); Rolf Kussäther (MedCom Gesellschaft für medizinische Bildverarbeitung mbH, Germany); Ulf Mäder (University of Applied Sciences, Germany); Rita Engenhardt-Cabillic (Philipps-University Marburg, Germany; University Hospital Gießen-Marburg, Germany); Klemens Zink (University of Applied Sciences, Germany; University Hospital Gießen-Marburg, Germany)	Poster session 27	Dosimetry, radiation protection and radiation biology III	P 261	12.09.2017	15:00
Small animal irradiation: verification of the dose distribution in a phantom using thermoluminescent dosimeters	Carole Simon (Universitätsklinikum Köln, Germany); Samet Bozkurt (Universitätsklinikum Köln, Germany); Wolfgang Baus (Universitätsklinikum Köln, Germany)	Poster session 27	Dosimetry, radiation protection and radiation biology III	P 262	12.09.2017	15:00
Influence of CT reconstruction kernels on dose distribution in liver radioembolization using tissue density estimation	Nadine Traulsen (Fraunhofer Institute for Medical Image Computing MEVIS, Germany); Smita Thoduka (Städtisches Klinikum Dresden-Friedrichstadt, Germany); Nasreddin Abolmaali (Städtisches Klinikum Dresden-Friedrichstadt, Germany); Andrea Schenk (Fraunhofer Institute for Medical Image Computing MEVIS, Germany)	Poster session 27	Dosimetry, radiation protection and radiation biology III	P 263	12.09.2017	15:00
Comparison between differing fill factor definitions for two-dimensional detector arrays	Tenzin Sonam Stelljes (University Clinic for Medical Radiation Physics, Germany); Daniela Poppinga (University Clinic for Medical Radiation Physics, Germany); Jana Kretschmer (University Clinic for Medical Radiation Physics, Germany); Leonie Brodbek (University Clinic for Medical Radiation Physics, Germany); Hui Khee Looe (University Clinic for Medical Radiation Physics, Germany); Dieterich Harder (Prof. em., Medical Physics and Biophysics, Germany); Björn Poppe (University Clinic for Medical Radiation Physics, Germany)	Poster session 27	Dosimetry, radiation protection and radiation biology III	P 265	12.09.2017	15:00
Design of a precise scintillation dosimetry system for the measuring of microcollimators	Catharina Scharmberg (Universitätsklinikum Essen, Germany; Technische Universität Dortmund, Germany); Marion Eichmann (Technische Universität Dortmund, Germany); Christian Rütten (Universitätsklinikum Essen, Germany); Bernhard Spaan (Technische Universität Dortmund, Germany); Dirk Flühs (Universitätsklinikum Essen, Germany)	Poster session 27	Dosimetry, radiation protection and radiation biology III	P 266	12.09.2017	15:00
Investigation of PEN based plastic scintillator dosimetry for Iridium-192 afterloading source	Sarah Schulz (Technische Universität Dortmund, Germany); Catharina Scharmberg (Universitätsklinikum Essen, Germany; Technische Universität Dortmund, Germany); Marion Eichmann (Technische Universität Dortmund, Germany); Christian Rütten (Universitätsklinikum Essen, Germany); Bernhard Spaan (Technische Universität Dortmund, Germany); Dirk Flühs (Universitätsklinikum Essen, Germany)	Poster session 27	Dosimetry, radiation protection and radiation biology III	P 267	12.09.2017	15:00
Experimental determination of conversion coefficients for estimating the patients' skin dose in surgical neuroangiography	Felix Bärenfänger (TU Dortmund, Germany); Stefan Rohde (Klinikum Dortmund, Germany); Andreas Block (Klinikum Dortmund, Germany)	Poster session 28	Dosimetry, radiation protection and radiation biology IV	P 268	12.09.2017	15:00
Position-dependent non-reference condition corrections for treatment plan verification using two-dimensional detector arrays	Jana Kretschmer (University Clinic for Medical Radiation Physics, Pius Hospital, Germany); Leonie Brodbek (University Clinic for Medical Radiation Physics, Pius Hospital, Germany); Tenzin S. Stelljes (University Clinic for Medical Radiation Physics, Pius Hospital, Germany); Hui Khee Looe (University Clinic for Medical Radiation Physics, Pius Hospital, Germany); Björn Poppe (University Clinic for Medical Radiation Physics, Pius Hospital, Germany)	Poster session 28	Dosimetry, radiation protection and radiation biology IV	P 269	12.09.2017	15:00

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Isocenter verification of a standard linear accelerator using the OCTAVIUS detector array 1000SRS	Leonie Brodbek (University Clinic for Medical Radiation Physics, Pius Hospital, Germany); Jana Kretschmer (University Clinic for Medical Radiation Physics, Pius Hospital, Germany); Tenzin S. Steljes (University Clinic for Medical Radiation Physics, Pius Hospital, Germany); Hui Khee Looe (University Clinic for Medical Radiation Physics, Pius Hospital, Germany); Britta Loutfi-Krauss (Goethe University Frankfurt, University Hospital Frankfurt am Main, Germany); Oliver Blanck (SAPHIR Radiosurgery Center, Germany; University Clinic Schleswig Holstein, Germany); Björn Poppe (University Clinic for Medical Radiation Physics, Pius Hospital, Germany)	Poster session 28	Dosimetry, radiation protection and radiation biology IV	P 270	12.09.2017	15:00
Determination of the amount of backscatter radiation in interventional radiography for the personnel	Revink Ali Ramadhan Wais (University of Duhok, Iraq); Robin Etzel (Technische Hochschule Mittelhessen, Germany); Martin Fiebich (Technische Hochschule Mittelhessen, Germany)	Poster session 28	Dosimetry, radiation protection and radiation biology IV	P 271	12.09.2017	15:00
Effects of ultra-short pulsed proton bunches on malignant T and B cells	Jens Ehlert (Heinrich-Heine-Universität Düsseldorf, Germany; Universitätsklinikum Düsseldorf, Germany); Sven Spickermann (Heinrich-Heine-Universität Düsseldorf, Germany); Ron-Patrick Cadeddu (Universitätsklinikum Düsseldorf, Germany); Oswald Willi (Heinrich-Heine-Universität Düsseldorf, Germany); Rainer Haas (Universitätsklinikum Düsseldorf, Germany)	Poster session 28	Dosimetry, radiation protection and radiation biology IV	P 272	12.09.2017	15:00
Comparison of thermoluminescence reader TLDcube and harshaw 3500 for dosimetry in radiology and radiation therapy	Dan Sidney Nitschke (Beuth University of Applied Sciences, Germany); Ulrich Jahn (Charite University, Germany); Oliver Neumann (Charite University, Germany); Volker Budach (Charite University, Germany); Martin Martin Roll (Beuth University of Applied Sciences, Germany); Markus Buchgeister (Beuth University of Applied Sciences, Germany)	Poster session 28	Dosimetry, radiation protection and radiation biology IV	P 273	12.09.2017	15:00
Validation of cosmic ray flux models using a spacecraft-mounted radiation monitor	Vanessa Wyrwoll (Universität Oldenburg, Germany); Sascha Lüdeke (Universität Oldenburg, Germany); Hugh Evans (ESA, Netherlands); Björn Poppe (Universität Oldenburg, Germany)	Poster session 28	Dosimetry, radiation protection and radiation biology IV	P 274	12.09.2017	15:00
Reducing radiation exposure and optimising image quality in x-ray examinations for neonates	Sergej Mikhailov (TU Dortmund, Germany); Nora Schulz (TU Dortmund, Germany); Annette Schmitz-Stolbrink (Klinikum Dortmund, Germany); Andreas Block (Klinikum Dortmund, Germany)	Poster session 28	Dosimetry, radiation protection and radiation biology IV	P 275	12.09.2017	15:00
Experimental verification of the currently used estimation for dose to the uterus in fluoroscopy examinations	Katharina Schröder (TU Dortmund, Germany); Kilian Seth (TU Dortmund, Germany); Katharina Loot (TU Dortmund, Germany); Andreas Block (Klinikum Dortmund, Germany)	Poster session 28	Dosimetry, radiation protection and radiation biology IV	P 276	12.09.2017	15:00
A novel optical hydrophone for the single-shot field measurements of high-power-pressure-pulse fields	Abtin Jamshidi Rad (HAW Hamburg, Germany); Friedrich Ueberle (HAW Hamburg, Germany)	Poster session 29	Medical measuring techniques II	P 277	12.09.2017	15:00
Requirements for modular measuring systems in individual treatment and care of dementia patients (PYRAMID)	Axel Steinbach (Studiengruppe INSIDER Klinik m.S. Rheumatologie und Immunologie der Charité Universitätsmedizin Berlin, Germany); Jacqueline Detert (Studiengruppe INSIDER, Klinik m.S. Rheumatologie und Immunologie der Charité Universitätsmedizin Berlin, Germany); Erik Jung (Medizinische Mikrosysteme, Fraunhofer Institut für Zuverlässigkeit und Mikrointegration, Germany); Vera Höhne-Zimmer (Studiengruppe INSIDER Klinik m.S. Rheumatologie und Immunologie der Charité Universitätsmedizin Berlin, Germany); Michael Richter (Medizinische Mikrosysteme, Fraunhofer Institut für Zuverlässigkeit und Mikrointegration, Germany); Sebastian Freidank (AG Medizinische Mikrosysteme am Lehrstuhl Mikrosystemtechnik Institut für Mikro- und Sensorsysteme, Otto-von-Guericke-Universität Magdeburg, Germany); Tobias Leipold (Clinpath GmbH, Germany); Marc Nagel (pilotfish GmbH, Germany); Luca Salvatore (Johner-Institut GmbH, Germany); Markus Detert (AG Medizinische Mikrosysteme am Lehrstuhl Mikrosystemtechnik Institut für Mikro- und Sensorsysteme, Otto-von-Guericke-Universität Magdeburg, Germany)	Poster session 29	Medical measuring techniques II	P 278	12.09.2017	15:00
Surface electromyography - measurement setup for the electrical characterisation of electrodes under consideration of boundary layer phenomena	Andreas Heinke (Institut für Biomedizinische Technik, TU Dresden, Germany); Paula Krüger (Institut für Biomedizinische Technik, TU Dresden, Germany); Zbigniew Śliwiński (Faculty of Medicine and Health Sciences, Poland); Hagen Malberg (Institut für Biomedizinische Technik, TU Dresden, Germany); Grzegorz Śliwiński (Institut für Biomedizinische Technik, TU Dresden, Germany)	Poster session 29	Medical measuring techniques II	P 279	12.09.2017	15:00
PromBERA – praeoperative EBERA – objektiver Promontorialtest zur Integritätsprüfung des Hörnervs bei Cochleaimplantat-Kandidaten	Daniel Polterauer (Klinikum Großhadern, Germany); Giacomo Mandruzzato (MED-EL, Austria); Maike Neuling (Klinikum Großhadern, Germany); Marek Polak (MED-EL, Austria); Joachim Michael Müller (Klinikum Großhadern, Germany); John-Martin Hempel (Klinikum Großhadern, Germany)	Poster session 29	Medical measuring techniques II	P 280	12.09.2017	15:00

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Examination of the skin conductance level (SCL) as an index of the activity of the sympathetic nervous system in physical and psychological stress situations	Janina Horstick (Fachhochschule Münster, Germany); Simon Siebers (Fachhochschule Münster, Germany); Claus Backhaus (Fachhochschule Münster, Germany)	Poster session 29	Medical measuring techniques II	P 281	12.09.2017	15:00
Impact of nocturnal respiratory symptoms (cough and wheezing) on the respiratory rate in patients with COPD	Olaf Hildebrandt (Technische Hochschule Mittelhessen, Germany); Philipps Universität Marburg, Germany); Ulrich Koehler (Philipps Universität Marburg, Germany); Karl Kesper (Philipps Universität Marburg, Germany); Werner Cassel (Philipps Universität Marburg, Germany); Patrick Fischer (Technische Hochschule Mittelhessen, Germany); Nilab Taher (Technische Hochschule Mittelhessen, Germany); Philipps Universität Marburg, Germany); Keywan Sohrabi (Technische Hochschule Mittelhessen, Germany); Volker Groß (Technische Hochschule Mittelhessen, Germany)	Poster session 29	Medical measuring techniques II	P 282	12.09.2017	15:00
Realization of pressure controlled ventilation for an automated public access emergency ventilator	Martin Degner (Universität Rostock, Germany); Henning Jürß (Universität Rostock, Germany); Hannes Nierath (Universität Rostock, Germany); Jens Schwarz (Sensatronic GmbH, Germany); Patricia Fuchs (Universitätsmedizin Rostock, Germany); Juliane Obermeier (Universitätsmedizin Rostock, Germany); Jochen Schubert (Universitätsmedizin Rostock, Germany)	Poster session 29	Medical measuring techniques II	P 283	12.09.2017	15:00
IMU-based motion capture system for real-time body joint angle measurement	Markus Hessinger (Technische Universität Darmstadt, Germany); Arthur Buchta (Technische Universität Darmstadt, Germany); Roland Werthschützky (Technische Universität Darmstadt, Germany); Mario Kupnik (Technische Universität Darmstadt, Germany)	Poster session 29	Medical measuring techniques II	P 286	12.09.2017	15:00
Development of an in silico-model to investigate the dynamic loads of a transcatheter aortic valve	Markus Bongert (FH Dortmund, Germany); Kuno Kloos (FH Dortmund, Germany); Marius Geller (FH Dortmund, Germany); Markus Schlömacher (Uniklinik Bergmannsheil Bochum, Germany); Tim Ricken (TU Dortmund, Germany); Volkmar Nicolas (Uniklinik Bergmannsheil Bochum, Germany); Justus Strauch (Uniklinik Bergmannsheil Bochum, Germany)	Poster session 30	Modelling and simulation III	P 288	12.09.2017	15:00
Heart rhythm model and simulation of electrophysiological studies and high-frequency ablations	Marco Schalk (Hochschule Offenburg, Germany); Matthias Heinke (Hochschule Offenburg, Germany); Johannes Hörth (Hochschule Offenburg, Germany)	Poster session 30	Modelling and simulation III	P 289	12.09.2017	15:00
Diffusion simulation of low molecular MRI contrast agents in micronecrotic tumor tissue for DCE-MRI	Olga Schimpf (Universitätsklinikum Essen Strahlentherapie, Germany); Stefan Hindel (Universitätsklinikum Essen Strahlentherapie, Germany); Lutz Lüdemann (Universitätsklinikum Essen Strahlentherapie, Germany)	Poster session 30	Modelling and simulation III	P 290	12.09.2017	15:00
A bile flow model for in-vitro testing of biliary stents – A prognosis of incrustation processes	Deusch Carolin (Universität Rostock, Germany); Olaf Specht (Institut für Implantatmaterialien und Biomaterialien e.V., Germany); Heidi Fleischer (Center for Life Science Automation - celisca, Germany); Ingolf Beutner (Klinikum Südstadt Rostock, Germany); Mareike Warkentin (Universität Rostock, Germany)	Poster session 31	Modelling and simulation IV	P 295	12.09.2017	15:00
Optimisation and validation of an FEA model for the simulation of the electrical flow through fish heads	Matthias Lüpke (Tierärztliche Hochschule Hannover, Germany); Wanda Hörnig (Tierärztliche Hochschule Hannover, Germany); Dieter Steinhagen (Tierärztliche Hochschule Hannover, Germany); Hermann Seifert (Tierärztliche Hochschule Hannover, Germany)	Poster session 31	Modelling and simulation IV	P 296	12.09.2017	15:00
Influence of total tumour volume on BED values: Simulation study using a PBPK model for 177Lu-labelled PSMA ligands	Nusrat Jihan Begum (Universität Ulm, Germany); Anne Thieme (Klinikum rechts der Isar, Technische Universität München, Germany); Ambros Beer (Universität Ulm, Germany); Matthias Eiber (Klinikum rechts der Isar, Technische Universität, Germany); Gerhard Glatting (Universität Ulm, Germany); Peter Kletting (Universität Ulm, Germany)	Poster session 31	Modelling and simulation IV	P 297	12.09.2017	15:00
Development of an algorithm for selecting the optimal radiopharmaceutical to molecular radiotherapy	Attarwala Ali Asgar (Medical Faculty Mannheim, Heidelberg University,Universitätsmedizin Mannheim, Germany); Luis David Jimenez (Medical Faculty Mannheim, Heidelberg University,Universitätsmedizin Mannheim, Germany); Deni Hardiansyah (Department of Electrical Engineering, Universitas Padjadjaran, Bandung, Indonesia, Indonesia; College of Pharmacy, University of Kentucky, BioPharm Building, 789 S. Limestone, Lexington, USA, American Samoa); Peter Kletting (Universitätsklinikum Ulm, Germany); Gerhard Glatting (Universitätsklinikum Ulm, Germany; Medical Faculty Mannheim, Heidelberg University,Universitätsmedizin Mannheim, Germany)	Poster session 31	Modelling and simulation IV	P 298	12.09.2017	15:00
Dynamic 7 layer model to generate synthetic signals for non-invasive fetal photoplethysmography	Marcel Böttrich (TU Ilmenau, Germany); Peter Husar (TU Ilmenau, Germany)	Poster session 31	Modelling and simulation IV	P 299	12.09.2017	15:00
Comparison of different Monte-Carlo-simulation software for phantom study in fluoroscopy	Dunja Jannek (Technische Universität Ilmenau, Germany); Andreas Keller (Technische Universität Ilmenau, Germany)	Poster session 31	Modelling and simulation IV	P 302	12.09.2017	15:00

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
3D-Modell der Tuba Eustachii aus Fusionierung histologischer Schnitte und des CBCTs – Grundlagen funktioneller Aspekte	Robert Schuon (Medizinische Hochschule Hannover, Germany); J. Schwarzensteiner (Medizinische Hochschule Hannover, Germany); T. Lenarz (Medizinische Hochschule Hannover, Germany); G. Paasche (Medizinische Hochschule Hannover, Germany); S. John (Medizinische Hochschule Hannover, Germany)	Poster session 31	Modelling and simulation IV	P 303	12.09.2017	15:00
Data-driven leaflet modeling for personalized aortic valve prostheses development	Jannis Hagenah (University of Lübeck, Germany; Graduate School for Computing in Medicine and Life Sciences, Germany); Tizian Evers (University of Lübeck, Germany); Michael Scharfschwerdt (University Hospital Schleswig-Holstein, Germany); Achim Schweikard (University of Lübeck, Germany)	Poster session 32	Organ and patient support systems II	P 304	12.09.2017	15:00
Long-term study of sound localization in cochlear implantees – Measured with a modified clinical diagnostic setup using virtual sound sources (ERKI-method)	Katharina Schmidt (JADE-UNIVERSITY OF APPLIED SCIENCES, Germany); Karsten Plotz (JADE-UNIVERSITY OF APPLIED SCIENCES, Germany)	Poster session 32	Organ and patient support systems II	P 305	12.09.2017	15:00
Online particle measurements during the simulated use of drug coated balloons	Ronja Dreger (Universitätsmedizin Rostock, Institut für Biomedizinische Technik, Germany); Christoph Brandt-Wunderlich (Institut für ImplantatTechnologie und Biomaterialien e.V., Germany); Anja Kurzhals (Universitätsmedizin Rostock, Institut für Biomedizinische Technik, Germany); Sebastian Kaule (Institut für ImplantatTechnologie und Biomaterialien e.V., Germany); Niels Grabow (Universitätsmedizin Rostock, Institut für Biomedizinische Technik, Germany); Klaus-Peter Schmitz (Universitätsmedizin Rostock, Institut für Biomedizinische Technik, Germany); Institut für ImplantatTechnologie und Biomaterialien e.V., Germany); Wolfram Schmidt (Universitätsmedizin Rostock, Institut für Biomedizinische Technik, Germany)	Poster session 32	Organ and patient support systems II	P 306	12.09.2017	15:00
Development of a measuring system to prevent extravasations	Leonard Pawelzik (FH Münster, Germany); Uvo Hölscher (FH Münster, Germany); Claus Backhaus (FH Münster, Germany)	Poster session 32	Organ and patient support systems II	P 307	12.09.2017	15:00
Adaption of ankle joint prostheses from CT data and determination of data on ankle joint strength	Heiner Martin (University medicine Rostock, Germany); Josephine Menz (University medicine Rostock, Germany); Niels Grabow (University medicine Rostock, Germany); Thomas Mittlmeier (University medicine Rostock, Germany)	Poster session 32	Organ and patient support systems II	P 308	12.09.2017	15:00
Gait biomechanics of patients with forefoot amputation using a customized carbon fiber prosthesis	Eugen Dötzel (Hochschule Ulm, Germany); Felix Capanni (Hochschule Ulm, Germany); Thomas Engleder (Hochschule Ulm, Germany); Jürgen M. Steinacker (Universitätsklinikum Ulm, Germany)	Poster session 32	Organ and patient support systems II	P 309	12.09.2017	15:00
Requirement specifications for the development of a minimal-invasive venous valve prosthesis based on electrospun cusp structures.	Maria Boeck (Universitätsmedizin Rostock, Germany); Jonas Keiler (Universitätsmedizin Rostock, Germany); Michael Stiehm (Universität Rostock, Germany); Wolfram Schmidt (Universitätsmedizin Rostock, Germany; Universität Rostock, Germany); Carsten Momma (Cortronik GmbH, Germany); Heinz Müller (Cortronik GmbH, Germany); Sabine Kischkel (Universitätsmedizin Rostock, Germany); Carsten Michael Bünger (Universitätsmedizin Rostock, Germany); Wolfgang Schareck (Universitätsmedizin Rostock, Germany); Andreas Wree (Universitätsmedizin Rostock, Germany); Klaus-Peter Schmitz (Universitätsmedizin Rostock, Germany; Universität Rostock, Germany); Niels Grabow (Universitätsmedizin Rostock, Germany)	Poster session 32	Organ and patient support systems II	P 310	12.09.2017	15:00
Cardiac support systems with embedded ultrasonic flow measurement	Bernward Reszel (em-tec GmbH, Germany); Stefan Schätzl (em-tec GmbH, Germany); Timo Lebold (em-tec GmbH, Germany); Elmar Huber (em-tec GmbH, Germany); Oliver Lange (em-tec GmbH, Germany)	Poster session 32	Organ and patient support systems II	P 311	12.09.2017	15:00
Conduct a study on the research and exemplary development of context-sensitive support systems for dementia patients with subsequent evaluation	Cedric Mester (FH Münster, Germany); Maximilian Kehmann (FH Münster, Germany); Elisabeth Ibenthal (FH Münster, Germany); Claus Backhaus (FH Münster, Germany)	Poster session 32	Organ and patient support systems II	P 312	12.09.2017	15:00
Development of short-pulsed, high-field electromagnets for laser-based proton therapy	Michael Schürer (OncoRay - Technische Universität Dresden , Germany; Helmholtz-Zentrum Dresden - Rossendorf, Germany; National Center for Tumor Diseases (NCT), Germany); Thomas Herrmannsdörfer (Helmholtz-Zentrum Dresden - Rossendorf, Germany); Leonhard Karsch (OncoRay - Technische Universität Dresden , Germany); Florian Kroll (Helmholtz-Zentrum Dresden - Rossendorf, Germany); Umar Masood (OncoRay - Technische Universität Dresden , Germany); Manfred Sobiella (Helmholtz-Zentrum Dresden - Rossendorf, Germany); Jörg Pawelke (OncoRay - Technische Universität Dresden , Germany; Helmholtz-Zentrum Dresden - Rossendorf, Germany)	Poster session 33	Radiation therapy IV	P 313	12.09.2017	15:00

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
A daily on-line plan delivery-QA of every fluence modulated treatment using the log files analysis software LINACWATCH (Qualiformed): defined tolerance limits and first results	Petra Hüttenrauch (Universitätsmedizin Göttingen, Germany); Thomas Failing (Universitätsmedizin Göttingen, Germany); Katharina Wilczek (Universitätsmedizin Göttingen, Germany); Daniela Wagner (Universitätsmedizin Göttingen, Germany)	Poster session 33	Radiation therapy IV	P 314	12.09.2017	15:00
Dose tracking and adaptive replanning at the example of prostate carcinomas treatment using RayStation	Mona Splinter (Deutsches Krebsforschungszentrum, Germany); Peter Häring (Deutsches Krebsforschungszentrum, Germany); Clemens Lang (Deutsches Krebsforschungszentrum, Germany); Eva Meyerhoff (Universitätsklinikum Heidelberg, Germany); Oliver Jäkel (Deutsches Krebsforschungszentrum, Germany)	Poster session 33	Radiation therapy IV	P 315	12.09.2017	15:00
Investigation of dosimetric deviations in MammoSite treatment using Monte Carlo simulations	Moritz Budde (Marien Hospital Herne, Germany); Irenäus A. Adamietz (Marien Hospital Herne, Germany); Ludwig Schmolinga (Marien Hospital Herne, Germany); Amal Ahl-Alhosseini (Marien Hospital Herne, Germany); Horst Hermanni (Marien Hospital Herne, Germany)	Poster session 33	Radiation therapy IV	P 316	12.09.2017	15:00
Optimization of the quality assurance of a low-energy radiosurgery treatment for age-related macular degeneration	Jessica Garczarczyk (TU Dortmund, Germany); Marion Eichmann (TU Dortmund, Germany); Dirk Flühs (Universitätsklinikum, Germany); Bernhard Spaan (TU Dortmund, Germany)	Poster session 33	Radiation therapy IV	P 318	12.09.2017	15:00
MLC dosimetric leaf gap (DLG) and transmission (T) revisited: taking into account spatial variations of DLG and T	Manfred Sassowsky (Inselspital - Universitätsspital Bern, Switzerland); Michael Fix (Inselspital - Universitätsspital Bern, Switzerland); Peter Manser (Inselspital - Universitätsspital Bern, Switzerland); Daniel Frauchiger (Inselspital - Universitätsspital Bern, Switzerland)	Poster session 33	Radiation therapy IV	P 320	12.09.2017	15:00
Minimally invasive tumor radiation with a miniaturized X-ray source and needle applicator	Alexander van Oepen (Otto-von-Guericke University Magdeburg, Germany); Ali Pashazadeh (Otto-von-Guericke University Magdeburg, Germany); Axel Boese (Otto-von-Guericke University Magdeburg, Germany); Michael Friebe (Otto-von-Guericke University Magdeburg, Germany)	Poster session 33	Radiation therapy IV	P 321	12.09.2017	15:00
reation and verification of a RapidPlan-model for computer based planning of dynamic IMRT for patients with rectal cancer	Marcelle K. TCHITNGA (Heine-Heinrich Universität Düsseldorf, Germany); Arnd Röser (Helios Klinikum Wuppertal, Germany, Germany); German RapidPlan Consortium German RapidPlan Consortium (German RapidPlan Consortium, Germany); Marc Piroth (Helios Klinikum Wuppertal, Germany, Germany)	Poster session 33	Radiation therapy IV	P 322	12.09.2017	15:00
Validation of an electron head model for the use of the internal accelerator MLC	Oliver Dohm (Klinik für Radioonkologie, Germany)	Poster session 33	Radiation therapy IV	P 323	12.09.2017	15:00
Clinical implementation of a multi layer ionization chamber detector for quality assurance in proton therapy	Daniela Kunath (Klinik für Strahlentherapie und Radioonkologie, Medizinische Fakultät und Universitätsklinikum Carl Gustav Carus Dresden, Technische Universität Dresden, Germany); Julia Hytry (OncoRay – Nationales Zentrum für Strahlenforschung in der Onkologie, Medizinische Fakultät und Universitätsklinikum Carl Gustav Carus, Technische Universität Dresden; Helmholtz-Zentrum Dresden - Rossendorf, Germany); Sebastian Makocki (Klinik für Strahlentherapie und Radioonkologie, Medizinische Fakultät und Universitätsklinikum Carl Gustav Carus Dresden, Technische Universität Dresden, Germany); Stefan Menkel (Klinik für Strahlentherapie und Radioonkologie, Medizinische Fakultät und Universitätsklinikum Carl Gustav Carus Dresden, Technische Universität Dresden, Germany); Maria Tschiche (Klinik für Strahlentherapie und Radioonkologie, Medizinische Fakultät und Universitätsklinikum Carl Gustav Carus Dresden, Technische Universität Dresden, Germany); Wolfgang Enghardt (Klinik für Strahlentherapie und Radioonkologie, Medizinische Fakultät und Universitätsklinikum Carl Gustav Carus Dresden, Technische Universität Dresden, Germany); OncoRay – Nationales Zentrum für Strahlenforschung in der Onkologie, Medizinische Fakultät und Universitätsklinikum Carl Gustav Carus, Technische Universität Dresden; Helmholtz-Zentrum Dresden - Rossendorf, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Institut für Radioonkologie – OncoRay, Germany; Deutsches Konsortium für Translationale Krebsforschung (DKTK), Partnerstandort Dresden und Deutsches Krebsforschungszentrum (DKFZ), Germany)	Poster session 34	Radiation therapy V	P 324	12.09.2017	15:00
Patient positioning accuracy in clinical practice: Influence of positioning errors on the real dose distribution for prostate and head-and-neck treatment	Katharina Bell (Universitätsklinikum des Saarlandes, Germany); Melanie Morlo (Universitätsklinikum des Saarlandes, Germany); Norbert Licht (Universitätsklinikum des Saarlandes, Germany); Christian Rube (Universitätsklinikum des Saarlandes, Germany); Yvonne Dzierma (Universitätsklinikum des Saarlandes, Germany)	Poster session 34	Radiation therapy V	P 325	12.09.2017	15:00

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Evaluation of deformable image registration in syngo.via RT image suite VB20	Alexandra Friedrich (Technische Hochschule Mittelhessen, Germany); Ebru Cinar (Technische Hochschule Mittelhessen, Germany); Klemens Zink (Universitätsklinikum Gießen und Marburg GmbH, Germany; Technische Hochschule Mittelhessen, Germany); Martin Böttcher (Universitätsklinikum Gießen und Marburg GmbH, Germany); Rita Engenhart-Cabillic (Universitätsklinikum Gießen und Marburg GmbH, Germany); Hilke Vorwerk (Universitätsklinikum Gießen und Marburg GmbH, Germany)	Poster session 34	Radiation therapy V	P 326	12.09.2017	15:00
Quality assurance of precise, respiratory-gated radiotherapy	Phillip Schick (Universitätsklinikum Düsseldorf, Germany); Holger Gottschlag (Universitätsklinikum Düsseldorf, Germany); Ioannis Simiantonakis (Universitätsklinikum Düsseldorf, Germany)	Poster session 34	Radiation therapy V	P 327	12.09.2017	15:00
Deep inspiration breath-hold (DIBH) versus free breathing (FB) in treatment of breast cancer: evaluation of 20 patients	Stephanie Pensold (Krankenhaus Dresden-Friedrichstadt, Germany); Heiko Tümmeler (Krankenhaus Dresden-Friedrichstadt, Germany); Philipp Schilling (Krankenhaus Dresden-Friedrichstadt, Germany); Judith Hiecke (Krankenhaus Dresden-Friedrichstadt, Germany)	Poster session 34	Radiation therapy V	P 328	12.09.2017	15:00
Positioning of catheters in HIPO inverse planning with centroidal voronoi tessellation for HDR-brachytherapy of prostate cancer	Jürgen Hense (Medical Center - University of Freiburg, Faculty of Medicine, University of Freiburg, Germany; German Cancer Consortium (DKTK), Germany; Hochschule Offenburg, Germany); Ilias Sachpazidis (Medical Center - University of Freiburg, Faculty of Medicine, University of Freiburg, Germany; German Cancer Consortium (DKTK), Germany); Harald Hoppe (Hochschule Offenburg, Germany); Dimos Baltas (Medical Center - University of Freiburg, Faculty of Medicine, University of Freiburg, Germany; German Cancer Consortium (DKTK), Germany)	Poster session 34	Radiation therapy V	P 329	12.09.2017	15:00
Daily procedures of radiation protection in proton therapy	Stefan Menkel (Universitätsklinikum Carl Gustav Carus Dresden, Germany); Julia Hytry (OncoRay – Nationales Zentrum für Strahlenforschung in der Onkologie, Medizinische Fakultät und Universitätsklinikum Carl Gustav Carus, Technische Universität Dresden; Helmholtz-Zentrum Dresden - Rossendorf, Germany); Daniela Kunath (Universitätsklinikum Carl Gustav Carus Dresden, Germany); Sebastian Makocki (Universitätsklinikum Carl Gustav Carus Dresden, Germany); Maria Tschiche (Universitätsklinikum Carl Gustav Carus Dresden, Germany); Wolfgang Enghardt (Universitätsklinikum Carl Gustav Carus Dresden, Germany; OncoRay – Nationales Zentrum für Strahlenforschung in der Onkologie, Medizinische Fakultät und Universitätsklinikum Carl Gustav Carus, Technische Universität Dresden; Helmholtz-Zentrum Dresden - Rossendorf, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Germany)	Poster session 34	Radiation therapy V	P 330	12.09.2017	15:00
Changes in quality of treatment-plans due to less irradiation directions for VMAT-plans	Patrick Rauwald-Josephs (Universitätsklinikum Marburg, Germany); Gheorghe Iancu (Universitätsklinikum Marburg, Germany); Martin Böttcher (Universitätsklinikum Marburg, Germany); Hilke Vorwerk (Universitätsklinikum Marburg, Germany); Klemens Zink (Universitätsklinikum Marburg, Germany); Rita Engenhart-Cabillic (Universitätsklinikum Marburg, Germany)	Poster session 34	Radiation therapy V	P 331	12.09.2017	15:00
Evaluation of the accuracy of a surface monitoring system for radiotherapy	Patrick Rauwald-Josephs (Universitätsklinikum Marburg, Germany); Martin Böttcher (Universitätsklinikum Marburg, Germany); Hilke Vorwerk (Universitätsklinikum Marburg, Germany); Klemens Zink (Universitätsklinikum Marburg, Germany); Rita Engenhart-Cabillic (Universitätsklinikum Marburg, Germany)	Poster session 34	Radiation therapy V	P 332	12.09.2017	15:00
Heart dose evaluation in left sided breast cancer treatment planning	Florian Exner (Universitätsklinikum Würzburg, Germany); Anne Richter (Universitätsklinikum Würzburg, Germany); Stefan Weick (Universitätsklinikum Würzburg, Germany); Otto Sauer (Universitätsklinikum Würzburg, Germany)	Poster session 34	Radiation therapy V	P 333	12.09.2017	15:00
Cone beam CT: evaluation of long term stability in dose and image quality	Petra Härtl (Universitätsklinikum, Germany); Oliver Koelbl (Universitätsklinikum, Germany); Barbara Dobler (Universitätsklinikum, Germany)	Poster session 35	Radiation therapy VI	P 336	12.09.2017	15:00
Dosimetric effects of soft tissue and bone matching approaches in image-guided radiotherapy of prostate cancer	Malte Mielke (Universitätsklinikum, Germany); Janett Köhn (Universitätsklinikum, Germany); Stefanie Preuß (Universitätsklinikum, Germany); Nadine Blümer (Universitätsklinikum, Germany); Britta Loutfi-Krauß (Universitätsklinikum, Germany); Martin Rauschal (Universitätsklinikum, Germany); Christian Scherf (Universitätsklinikum, Germany); Jörg Licher (Universitätsklinikum, Germany); Ulla Ramm (Universitätsklinikum, Germany)	Poster session 35	Radiation therapy VI	P 337	12.09.2017	15:00

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Constancy tests for linacs according to DIN 6875-4 and DIN 6847-5 for intensity-modulated radiation therapy using the QUALIMAGIQ platform from QualiFormeD	Miriam Kattinger (Marienhospital Stuttgart, Germany); Maya Shariff (Marienhospital Stuttgart, Germany; Universität Tübingen, Germany); Christian Gromoll (Marienhospital Stuttgart, Germany; Universität Tübingen, Germany; Universität Stuttgart, Germany)	Poster session 35	Radiation therapy VI	P 339	12.09.2017	15:00
Construction of a 3D printed head and neck phantom for dose evaluations in radiation therapy	Melanie Grehn (UKSH Campus Lübeck, Germany); Christian Ziemann (UKSH Campus Lübeck, Germany); Maik Stille (Universität zu Lübeck, Germany); Dirk Rades (UKSH Campus Lübeck, Germany); Thorsten M. Buzug (Universität zu Lübeck, Germany)	Poster session 35	Radiation therapy VI	P 340	12.09.2017	15:00
A new technics to the whole body irradiation (TBI)	Christian Gromoll (Marienhospital Stuttgart, Germany; Universität Stuttgart, Germany); Tanja Jungert (Marienhospital Stuttgart, Germany)	Poster session 35	Radiation therapy VI	P 341	12.09.2017	15:00
Path length correction for MRI compatible varian ring applicators	Thomas Bezold (Universitätsmedizin der Johannes Gutenberg Universität Mainz, Germany); Heiko Karle (Universitätsmedizin der Johannes Gutenberg Universität Mainz, Germany)	Poster session 35	Radiation therapy VI	P 342	12.09.2017	15:00
A new method for position-sensitive spectrometry of laser-accelerated proton bunches using the Timepix detector	Matthias Würl (Ludwig-Maximilians-Universität München, Germany); Francesco Olivari (Ludwig-Maximilians-Universität München, Germany; Università degli studi di Pavia, Italy); Chiara Gianoli (Ludwig-Maximilians-Universität München, Germany); Franz Englbrecht (Ludwig-Maximilians-Universität München, Germany); Anatoly Rozenfeld (University of Wollongong, Australia); Katia Parodi (Ludwig-Maximilians-Universität München, Germany)	Poster session 35	Radiation therapy VI	P 343	12.09.2017	15:00
Nonlinear robust optimization methods for 4D treatment planning in carbon ion therapy	Moritz Wolf (GSI, Germany); Christian Graeff (GSI, Germany)	Poster session 35	Radiation therapy VI	P 344	12.09.2017	15:00
Quality assurance for a replaced IRIS collimator system on a cyberKnife M6	Christian Albrecht (Schwarzwald-Baar-Klinikum, Germany); Manfred Alraun (Schwarzwald-Baar-Klinikum, Germany)	Poster session 35	Radiation therapy VI	P 345	12.09.2017	15:00
Analysis and evaluation of the treatment planning system monaco (Elekta) for paranasal tumours	Victoria Siepen (Uniklinik RWTH Aachen , Germany; FH Aachen Campus Jülich, Germany); Gisela Hürtgen (Uniklinik RWTH Aachen , Germany; RWTH Aachen, Germany); Achim Stahl (RWTH Aachen, Germany); Karl Ziemons (FH Aachen Campus Jülich, Germany); Michael J. Eble (Uniklinik RWTH Aachen , Germany)	Poster session 36	Radiation therapy VII	P 346	12.09.2017	15:00
Dose to organs at risk in boost irradiation for breast cancer-brachyboost vs. teleboost.	Julia Remmele (Uniklinikum Leipzig, Germany); Ulrich Wolf (Uniklinikum Leipzig, Germany)	Poster session 36	Radiation therapy VII	P 347	12.09.2017	15:00
Evaluation of new 2D ripple filters in scanned proton therapy	Toke Printz Ringbæk (Technische Hochschule Mittelhessen, Germany; Philipps University, Germany); Uli Weber (GSI helmholtzzentrum für schwerionenforschung gmbh, Germany); Alina Santiago (Philipps University, Germany; University Medical Center (UKGM), Germany); Yuri Simeonov (Technische Hochschule Mittelhessen, Germany); Peter Fritz (St Marien-Krankenhaus, Germany); Andrea Wittig (Philipps University, Germany; University Medical Center (UKGM), Germany); Gheorghe Iancu (University Medical Center (UKGM), Germany); Leszek Grzanka (Polish Academy of Sciences, Poland; AGH University of Science and Technology, Poland); Niels Bassler (Stockholm University, Sweden); Rita Engenhart-Cabillic (Philipps University, Germany; University Medical Center (UKGM), Germany); Klemens Zink (Technische Hochschule Mittelhessen, Germany; University Medical Center (UKGM), Germany)	Poster session 36	Radiation therapy VII	P 348	12.09.2017	15:00
Improving dose calculation accuracy using a virtual table model for positioning systems	Judith Hiecke (Krankenhaus Dresden-Friedrichstadt, Germany); Philipp Schilling (Krankenhaus Dresden-Friedrichstadt, Germany); Heiko Tümmeler (Krankenhaus Dresden-Friedrichstadt, Germany); Knut Merla (Krankenhaus Dresden-Friedrichstadt, Germany)	Poster session 36	Radiation therapy VII	P 349	12.09.2017	15:00
Design and dosimetry of individually shaped shielding for beta eye plaque	Henning Manke (Technische Universität Dortmund, Germany); Catharina Scharmberg (Universitätsklinikum Essen, Germany; Technische Universität Dortmund, Germany); Marion Eichmann (Technische Universität Dortmund, Germany); Christian Rütten (Universitätsklinikum Essen, Germany); Bernhard Spaan (Technische Universität Dortmund, Germany); Dirk Flühs (Universitätsklinikum Essen, Germany)	Poster session 36	Radiation therapy VII	P 350	12.09.2017	15:00
Comparison of Monte Carlo simulations, radiochromic film measurements and TPS dose distributions for peripheral doses in Ir-192 multicatheter breast cancer brachytherapy	Marcel Klingner (Universitätsklinikum Leipzig, Germany)	Poster session 36	Radiation therapy VII	P 352	12.09.2017	15:00
First clinical experiences with the new transmission detector Dolphin on TrueBeam accelerator	Sedef Ibisi (TU Dortmund, Germany); Marvin Kowalski (TU Dortmund, Germany); Katharina Loot (TU Dortmund, Germany); Oliver Waletzko (Klinikum Dortmund, Germany); Ralf Rohn (Klinikum Dortmund, Germany); Andreas Block (Klinikum Dortmund, Germany)	Poster session 36	Radiation therapy VII	P 355	12.09.2017	15:00

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Mechanical investigation of newly hybrid dental implants	Carmen Zietz (Universitätsmedizin Rostock, Germany; INNOPROOF GmbH, Germany); Danny Vogel (Universitätsmedizin Rostock, Germany); Aurica Mitrovic (ZM Präzisionsdentaltechnik GmbH, Germany); Rainer Bader (Universitätsmedizin Rostock, Germany)	Poster session 37	Cells, materials and biochemistry IV	P 358	12.09.2017	15:00
Influence of cold atmospheric pressure plasma on biofilms of staphylococcus epidermidis on structured titanium – concerning antimicrobial potential and gentamicin susceptibility	Katharina Wegner (Universitätsmedizin Rostock, Germany; Universitätsmedizin Rostock, Germany); Kathrin Duske (Universitätsmedizin Rostock, Germany); Thomas Dauben (Universitätsmedizin Rostock, Germany; Universitätsmedizin Rostock, Germany); Sarah Zaatreh (Universitätsmedizin Rostock, Germany); Hermann Lang (Universitätsmedizin Rostock, Germany); Thomas von Woedtke (Leibniz-Institut für Plasmaforschung und Technologie e.V., Germany); Rainer Bader (Universitätsmedizin Rostock, Germany); J. Barbara Nebe (Universitätsmedizin Rostock, Germany); Bernd Kreikemeyer (Universitätsmedizin Rostock, Germany)	Poster session 37	Cells, materials and biochemistry IV	P 359	12.09.2017	15:00
Micro plasma source for the selective treatment of cell cultures	Mike Stubenrauch (Technische Universität Ilmenau, Germany); Michael Fischer (Technische Universität Ilmenau, Germany); Ady Naber (Karlsruher Institut für Technologie, Germany); Cornelia Wiegand (Universitätsklinikum Jena, Germany); Uta Christine Hipler (Universitätsklinikum Jena, Germany); Hartmut Witte (Technische Universität Ilmenau, Germany); Jens Müller (Technische Universität Ilmenau, Germany)	Poster session 37	Cells, materials and biochemistry IV	P 361	12.09.2017	15:00
Multilayer diffusion-barrier model for experimental determination of coated-implant related drug eluting processes	Jan Krieger (Fachhochschule Lübeck, Germany); Stephan Klein (Fachhochschule Lübeck, Germany)	Poster session 37	Cells, materials and biochemistry IV	P 362	12.09.2017	15:00
96-well plate ultrasonic applicator for high-throughput in-vitro hyperthermia experiments	Christian Degel (Fraunhofer IBMT, Germany); Franz-Josef Becker (Fraunhofer IBMT, Germany); Holger Hewener (Fraunhofer IBMT, Germany); Doudou Xu (Universität Leipzig, Germany); Andreas Melzer (Universität Leipzig, Germany); Marc Fournelle (Fraunhofer IBMT, Germany); Steffen Tretbar (Fraunhofer IBMT, Germany)	Poster session 37	Cells, materials and biochemistry IV	P 363	12.09.2017	15:00
A new concept of interconnecting feedthrough-bearing substrates with conducting wires in active implantable medical devices.	Michael Langenmair (Uniklinik Freiburg, Germany; Albert-Ludwigs Universität Freiburg, Germany); Fabian Kimmig (Albert-Ludwigs Universität Freiburg, Germany; neuroloop GmbH, Germany); Tim Boretius (neuroloop GmbH, Germany); Dennis T. T. Plachta (Albert-Ludwigs Universität Freiburg, Germany; neuroloop GmbH, Germany); Thomas Stieglitz (Albert-Ludwigs Universität Freiburg, Germany)	Poster session 37	Cells, materials and biochemistry IV	P 364	12.09.2017	15:00
The influence of different FimH gene structures of several Escherichia coli pathotypes on the attachment behaviour to intestinal cell lines and proteins	Christin Bartlitz (BTU Cottbus-Senftenberg, Germany)	Poster session 38	Cells, materials and biochemistry V	P 365	12.09.2017	15:00
Additive manufacturing of ceramic and metal-ceramic-components for medical applications	Uwe Scheithauer (Fraunhofer IKTS, Germany); Eric Schwarzer (Fraunhofer IKTS, Germany); Tassilo Moritz (Fraunhofer IKTS, Germany)	Poster session 38	Cells, materials and biochemistry V	P 366	12.09.2017	15:00
Tailored biofunctionalized surfaces fabricated by direct laserinterference patterning	Florian Rößler (TU Dresden, Germany); Christoph Zwahr (TU Dresden, Germany); Denise Günther (TU Dresden, Germany); Andrés Fabián Lasagni (TU Dresden, Germany)	Poster session 38	Cells, materials and biochemistry V	P 367	12.09.2017	15:00
Effect of iron content on the spectral quality of MPI tracer material	Kerstin Lüdtkke-Buzug (Universität zu Lübeck, Germany); Ankit Malhotra (Universität zu Lübeck, Germany)	Poster session 38	Cells, materials and biochemistry V	P 368	12.09.2017	15:00
Chemically modified microstructured PDMS surfaces influence adipose-derived stem cell behavior	Svenja Nellinger (Reutlingen University, Germany; University of Tübingen, Germany); Markus Schneider (Reutlingen University, Germany); Ralf Kemkemer (Reutlingen University, Germany); Max Planck Institute for Intelligent Systems, Germany); Petra J. Kluger (Reutlingen University, Germany; Fraunhofer Institute for Interfacial Engineering and Biotechnology, Germany)	Poster session 38	Cells, materials and biochemistry V	P 369	12.09.2017	15:00
"Medical Grade" polymeric additive manufacturing technologies	Stefan Leonhardt (Technische Universität München, Germany); Miriam Haerst (Technische Universität München, Germany); Stefan Fischer (Technische Universität München, Germany); Sebastian Pammer (Technische Universität München, Germany); Franz Bauer (Technische Universität München, Germany); Markus Eblenkamp (Technische Universität München, Germany)	Poster session 38	Cells, materials and biochemistry V	P 370	12.09.2017	15:00
Preparation and characterization of a standardized testing procedure for covalently-immobilized biological coatings using a laminar flow cell	Silke Keller (University of Stuttgart, Germany); Janine Raßloff (Reutlingen University, Germany); Christopher Probst (Fraunhofer Institute for Interfacial Engineering and Biotechnology (IGB), Germany); Monika Bach (Fraunhofer Institute for Interfacial Engineering and Biotechnology (IGB), Germany); Petra Kluger (Reutlingen University, Germany; Fraunhofer Institute for Interfacial Engineering and Biotechnology (IGB), Germany)	Poster session 38	Cells, materials and biochemistry V	P 374	12.09.2017	15:00

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Investigation of infectious diseases using a novel in vitro diagnostic microfluidic chip	Taleieh Rajabi (Institut für Mikrostrukturtechnik (IMT), Germany); Helena Melzer (Institut für Mikrostrukturtechnik (IMT), Germany); Ralf Ahrens (Institut für Mikrostrukturtechnik (IMT), Germany); Guido Böse (Zendia GmbH, Germany); Adreas E. Guber (Institut für Mikrostrukturtechnik (IMT), Germany)	Poster session 39	Cells, materials and biochemistry VI	P 378	12.09.2017	15:00
Controlled infiltration of cells into electrospun scaffolds fabricated for applications in small diameter vascular grafts	Sinduja Suresh (Leibniz Universität Hannover, Germany); Oleksandr Gryshkov (Leibniz Universität Hannover, Germany); Birgit Glasmacher (Leibniz Universität Hannover, Germany)	Poster session 39	Cells, materials and biochemistry VI	P 380	12.09.2017	15:00
Rapid prototyping of implantable high accuracy platinum thin film tracks via laser evaporation	Patrick Kiele (IMTEK/ Universität Freiburg, Germany); Paul Čvančara (IMTEK/ Universität Freiburg, Germany); Matthias Mueller (IMTEK/ Universität Freiburg, Germany); Thomas Stieglitz (IMTEK/ Universität Freiburg, Germany)	Poster session 39	Cells, materials and biochemistry VI	P 381	12.09.2017	15:00
Polarimeter compensation methods for drift and scattering effects by using information comprising signal frequency components	Christian Stark (Lübeck University of Applied Sciences, Germany); Felix Fiedler (Lübeck University of Applied Sciences, Germany; ,); Benjamin Redmer (Lübeck University of Applied Sciences, Germany); Reza Behroozian (Lübeck University of Applied Sciences, Germany); Stefan Müller (Lübeck University of Applied Sciences, Germany)	Poster session 39	Cells, materials and biochemistry VI	P 383	12.09.2017	15:00
Model-based therapy	Thomas Neumuth (Universität Leipzig, Germany)	Network session 4	Special session on model-based therapy	NW 18	12.09.2017	15:00
Therapy decision support system using Bayesian networks	Mario A. Cypko (Universität Leipzig, Germany)	Network session 4	Special session on model-based therapy	NW 19	12.09.2017	15:00
Framework for context-aware assistance in integrated operating rooms	Stefan Franke (Universität Leipzig, Germany); Max Rockstroh (Universität Leipzig, Germany); Thomas Neumuth (Universität Leipzig, Germany)	Network session 4	Special session on model-based therapy	NW 20	12.09.2017	15:00
Visualization for model-based therapy decision support	Steffen Oeltze-Jafra (University of Leipzig, Germany)	Network session 4	Special session on model-based therapy	NW 21	12.09.2017	15:00
Optimizing procedures: value added services based on OR integration	Max Rockstroh (Universität Leipzig, ICCAS, Germany); Stefan Franke (Universität Leipzig, ICCAS, Germany); Thomas Neumuth (Universität Leipzig, ICCAS, Germany)	Network session 4	Special session on model-based therapy	NW 22	12.09.2017	15:00
Smart hip prosthesis – an overview	Frank Deicke (Fraunhofer IPMS, Germany)	Network session 5	Theranostic implants	NW 23	12.09.2017	15:00
Overview on an implantable multi sensor system for cardiovascular monitoring	Michael Görtz (Fraunhofer IMS, Duisburg, Germany) Anton Grabmaier (Fraunhofer IMS, Duisburg, Germany) Maik Wiemer (Fraunhofer ENAS, Chemnitz, Germany) Joachim Storsberg (Fraunhofer IAP, Potsdam, Germany) Claus Duschl (Fraunhofer IZI, Potsdam, Germany) Gerd vom Bögel (Fraunhofer IMS, Duisburg, Germany)	Network session 5	Theranostic implants	NW 24	12.09.2017	15:00
Controlling of a hand prosthesis using epimysial signals and peripheral nerve stimulation	Klaus-Peter Hoffmann (Fraunhofer-Institut für Biomedizinische Technik, Germany)	Network session 5	Theranostic implants	NW 25	12.09.2017	15:00
Fall-management system for elderly by multisensory-analysis with integration in a social environment	Jose Manuel Garcia (FH Münster, Germany); Leonard Backschat (FH Münster, Germany); Claus Backhaus (FH Münster, Germany); Uvo Hölscher (FH Münster, Germany)	Session 44	Home health care and ambient assisted living	V 140	12.09.2017	16:00
Consolidation of virtual coaching technologies for tele-rehabilitation	Hannes Schlieter (TU Dresden, Germany); Massimo Caprino (Casa di Cura del Policlinico Spa, Italy); Kai Gand (TU Dresden, Germany)	Session 44	Home health care and ambient assisted living	V 142	12.09.2017	16:00
The potential of psychophysical and health related knowledge for building automation control	Jannik Fleßner (Jade University of Applied Sciences, Germany); Melina Frenken (Jade University of Applied Sciences, Germany)	Session 44	Home health care and ambient assisted living	V 143	12.09.2017	16:00
Determination of the capillary diameter from T2 and T2* measurements	Lukas Buschle (DKFZ, Germany; Universitätsklinikum, Germany); Felix Kurz (DKFZ, Germany; Universitätsklinikum, Germany); Heinz-Peter Schlemmer (DKFZ, Germany); Thomas Kampf (Universität, Germany); Christian Ziener (DKFZ, Germany; Universitätsklinikum, Germany)	Session 45	Imaging and image processing IV – MRI	V 144	12.09.2017	16:00
How vessel architectural imaging depends on the vessel architecture	Lukas Buschle (DKFZ, Germany; Universitätsklinikum, Germany); Ke Zhang (DKFZ, Germany); Volker Sturm (DKFZ, Germany; Universitätsklinikum, Germany); Heinz-Peter Schlemmer (DKFZ, Germany); Felix Kurz (DKFZ, Germany; Universitätsklinikum, Germany); Christian Ziener (DKFZ, Germany; Universitätsklinikum, Germany)	Session 45	Imaging and image processing IV – MRI	V 145	12.09.2017	16:00
A simulation study in large receiver coil arrays for highly accelerated cardiac MRI	Robin Etzel (Technische Hochschule Mittelhessen, Germany); Andreas H. Mahnken (Philipps-Universität Marburg, Germany); Boris Keil (Technische Hochschule Mittelhessen, Germany)	Session 45	Imaging and image processing IV – MRI	V 146	12.09.2017	16:00

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Hyperpolarization without a polarizer: first 13C-MRI in vivo	Andreas Benjamin Schmidt (Universitätsklinikum Freiburg, Medizinische Fakultät, Universität Freiburg, Germany); Stephan Berner (German Cancer Constortium (DKTK), partner site Freiburg; and German Cancer Research Center (DKFZ) , Germany; Universitätsklinikum Freiburg, Medizinische Fakultät, Universität Freiburg, Germany); Moritz Braig (Universitätsklinikum Freiburg, Medizinische Fakultät, Universität Freiburg, Germany); Waldemar Schimpf (Universitätsklinikum Freiburg, Medizinische Fakultät, Universität Freiburg, Germany); Christoph Müller (German Cancer Constortium (DKTK), partner site Freiburg; and German Cancer Research Center (DKFZ) , Germany; Universitätsklinikum Freiburg, Medizinische Fakultät, Universität Freiburg, Germany); Jürgen Hennig (Universitätsklinikum Freiburg, Medizinische Fakultät, Universität Freiburg, Germany); Dominik von Elverfeldt (Universitätsklinikum Freiburg, Medizinische Fakultät, Universität Freiburg, Germany); Jan-Bernd Hövener (German Cancer Constortium (DKTK), partner site Freiburg; and German Cancer Research Center (DKFZ) , Germany; Universitätsklinikum Freiburg, Medizinische Fakultät, Universität Freiburg, Germany)	Session 45	Imaging and image processing IV – MRI	V 147	12.09.2017	16:00
Towards current density imaging with ultra-low-field Nnuclear magnetic resonance	Peter Hömmen (Physikalisch-Technische Bundesanstalt, Germany); Jan-Hendrik Storm (Physikalisch-Technische Bundesanstalt, Germany); Rainer Körber (Physikalisch-Technische Bundesanstalt, Germany)	Session 45	Imaging and image processing IV – MRI	V 148	12.09.2017	16:00
Susceptibility induced B0 gradients effect on myocardium tissue DTI at high magnetic fields: analysis of shimming strategies	Maxim Terekhov (Universitätsklinikum Würzburg, Germany); David Lohr (Universitätsklinikum Würzburg, Germany); Michael Hock (Universitätsklinikum Würzburg, Germany); Laura Schreiber (Universitätsklinikum Würzburg, Germany)	Session 45	Imaging and image processing IV – MRI	V 149	12.09.2017	16:00
Designing a distributed sensor system for the spectral analysis of ambient air	Jens-Uwe Just (HarzOptics GmbH, Germany); Christian Reinboth (HarzOptics GmbH, Germany); Andreas Müller (Prototype Design Müller, Germany); Ulrich Fischer-Hirchert (HarzOptics GmbH, Germany)	Session 46	BMBF-Zwanzig20 joint project: Fast Actuator and Sensor Technologies (FAST) care	FS 84	12.09.2017	16:00
Optimization of dynamic properties of exo-prostheses using a distributed inertial measurement system	Filip Szufnarowski (Otto Bock HealthCare GmbH, Germany); Erik Albrecht-Laatsch (Otto Bock HealthCare GmbH, Germany)	Session 46	BMBF-Zwanzig20 joint project: Fast Actuator and Sensor Technologies (FAST) care	FS 86	12.09.2017	16:00
Presentation of a concept to support rehabilitation through realtime feedback/monitoring in the home environment	Sebastian Stoutz (Otto-von-Guericke-Universität Magdeburg, Germany); Lutz Schega (Otto-von-Guericke-Universität Magdeburg, Germany)	Session 46	BMBF-Zwanzig20 joint project: Fast Actuator and Sensor Technologies (FAST) care	FS 88	12.09.2017	16:00
Requirements of low latency sensor/actuator networks for e-health applications	Matthias Stege (Exelonix GmbH, Germany)	Session 46	BMBF-Zwanzig20 joint project: Fast Actuator and Sensor Technologies (FAST) care	FS 89	12.09.2017	16:00
Regional specific airway resistance determined by electrical impedance tomography and body plethysmography	Sabine Krüger-Ziolek (Hochschule Furtwangen, Germany); Benjamin Schullcke (Hochschule Furtwangen, Germany); Bo Gong (Hochschule Furtwangen, Germany); Bernhard Laufer (Hochschule Furtwangen, Germany); Knut Möller (Hochschule Furtwangen, Germany)	Session 47	Biosignal processing and monitoring III	V 150	12.09.2017	16:00
New method for an interpolation of physiocal sequences in continuous blood pressure data	Steffen Rieger (TU Ilmenau, Germany); Daniel Baumgarten (UMIT, Austria); Silvio Dutz (TU Ilmenau, Germany); Sascha Klee (TU Ilmenau, Germany)	Session 47	Biosignal processing and monitoring III	V 153	12.09.2017	16:00
Multivariate high resolution joint symbolic dynamics (mHRJSD) - A new tool to analyze couplings in physiological networks	Steffen Schulz (Ernst-Abbe-Hochschule Jena, Germany); Minia Ricoy Castro (Universitat Pompeu Fabra, Spain); Beatriz Giraldo (Universitat Politècnica de Catalunya (UPC), Spain); Jens Haueisen (TU Ilmenau, Germany); Andreas Voss (Ernst-Abbe-Hochschule Jena, Germany)	Session 47	Biosignal processing and monitoring III	V 154	12.09.2017	16:00
Development of a viscosity model for a silicone rubber 3D printing process	Jan Stieghorst (Hannover Medical School, Germany; Cluster of Excellence Hearing4all, Germany); Theodor Doll (Hannover Medical School, Germany; Cluster of Excellence Hearing4all, Germany)	Session 48	Individualised implants	FS 91	12.09.2017	16:00
Direct acoustic stimulation with the codacs™	Hannes Maier (Medizinische Hochschule Hannover, Germany); Susan Busch (Medizinische Hochschule Hannover, Germany); Eugen Kludt (Medizinische Hochschule Hannover, Germany); Martin Großhämichen (Medizinische Hochschule Hannover, Germany); Thomas Lenarz (Medizinische Hochschule Hannover, Germany)	Session 48	Individualised implants	FS 92	12.09.2017	16:00
Adaptive anticoagulant polymer coatings for blood contacting medical products	Carsten Werner (Leibniz Institute of Polymer Research Dresden, Germany)	Session 49	BMBF-Zwanzig20 joint project: RESPONSE	FS 95	12.09.2017	16:00

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Innovation strategies for cardiovascular implants – magnesium dc scaffold and TAVI	Hüseyin Ince (Universitätsmedizin Rostock, Germany); Sebastian Kaule (Institut für ImplantatTechnologie und Biomaterialien e.V., Germany); Alper Öner (Universitätsmedizin Rostock, Germany); Michael Stiehm (Institut für ImplantatTechnologie und Biomaterialien e.V., Germany); Stefan Siewert (Institut für ImplantatTechnologie und Biomaterialien e.V., Germany); Niels Grabow (Universitätsmedizin Rostock, Germany); Klaus-Peter Schmitz (Institut für ImplantatTechnologie und Biomaterialien e.V., Germany; Universitätsmedizin Rostock, Germany)	Session 49	BMBF-Zwanzig20 joint project: RESPONSE	FS 96	12.09.2017	16:00
Stenting the Eustachian tube – a new treatment concept for chronic otitis media	Thomas Lenarz (Medizinische Hochschule Hannover, Germany); Gerrit Paasche (Medizinische Hochschule Hannover, Germany); Robert Schuon (Medizinische Hochschule Hannover, Germany); Tamara Wilfling (Medizinische Hochschule Hannover, Germany); Heinz Müller (Cortronic GmbH, Germany); Carsten Momma (Cortronic GmbH, Germany); Daniel Lootz (Cortronic GmbH, Germany); Niels Grabow (Universität Rostock, Germany); Kerstin Schümann (Universität Rostock, Germany); Wolfram Schmidt (Universität Rostock, Germany); Klaus-Peter Schmitz (Universität Rostock, Germany); Marcus Eisenhut (Bess pro GmbH, Germany); Tobias Stein (Bess pro GmbH, Germany); Stephan Koch (Bess pro GmbH, Germany); Nicolas Bohm (Bess pro GmbH, Germany)	Session 49	BMBF-Zwanzig20 joint project: RESPONSE	FS 98	12.09.2017	16:00
Electrospun fleeces in drug delivery	Ralf Wyrwa (INNOVENT e.V., Germany); Torsten Walter (INNOVENT e.V., Germany); Matthias Schnabelrauch (INNOVENT e.V., Germany)	Session 49	BMBF-Zwanzig20 joint project: RESPONSE	FS 99	12.09.2017	16:00
Status and perspectives of NanoBioMedicine in Germany and Europe	Klaus-Michael Weltring (Gesellschaft für Bioanalytik Münster e. V., Germany; Deutsch Plattform NanoBioMedizin, Germany)	Session 50	NanoBioMedicine	FS 101	12.09.2017	16:00
Cell transplantation in lumbar spine disc degeneration disease	Hans Joerg Meisel (BG Klinikum Bergmannstrost, Germany); Christian Hohaus (Städtisches Klinikum Dessau, Germany); Yvonne Minkus (BG Klinikum Bergmannstrost, Germany); Timothy Ganey (Atlanta Medical Center, USA)	Session 50	NanoBioMedicine	FS 102	12.09.2017	16:00
Challenges in the drug release testing of nanomedicines	Mukul Ashtikar (Fraunhofer Institute for Molecular Biology and Applied Ecology , Germany)	Session 50	NanoBioMedicine	FS 103	12.09.2017	16:00
On the road to biomimetic implants by additive manufacturing using functional organic materials	Günter Tovar (Institut für Grenzflächenverfahrenstechnik und Plasmatechnologie IGVP, Universität Stuttgart , Germany); Kirsten Borchers (Institut für Grenzflächenverfahrenstechnik und Plasmatechnologie IGVP, Universität Stuttgart , Germany); Lisa Sewald (Institut für Grenzflächenverfahrenstechnik und Plasmatechnologie IGVP, Universität Stuttgart , Germany); Alexander Southan (Institut für Grenzflächenverfahrenstechnik und Plasmatechnologie IGVP, Universität Stuttgart , Germany)	Session 50	NanoBioMedicine	FS 105	12.09.2017	16:00
Determination of focal spot size for linear accelerators – Comparison of experiment and simulation	Matthias Sure (Uniklinik Köln, Germany); Wolfgang W. Baus (Uniklinik Köln, Germany); Alexandra Hellerbach (Uniklinik Köln, Germany); Mauritius Hoevels (Uniklinik Köln, Germany); Harald Treuer (Uniklinik Köln, Germany)	Session 51	Radiation therapy V – Advanced quality assurance	V 157	13.09.2017	09:00
The photon-brachytherapy radiation quality-index QBT	Golam Abu Zakaria (Klinikum Oberberg, Germany); Ulrich Quast (Uniklinikum Essen, Germany); Theodor Kaulich (Universitätsklinik für Radioonkologie, Germany)	Session 51	Radiation therapy V – Advanced quality assurance	V 158	13.09.2017	09:00
Quality assurance for interstitial brachytherapy using a hybrid flexitron afterloader system	Karoline Kallis (University Hospital Erlangen, Germany); Vratislav Strnad (University Hospital Erlangen, Germany); Rainer Fietkau (University Hospital Erlangen, Germany); Christoph Bert (University Hospital Erlangen, Germany)	Session 51	Radiation therapy V – Advanced quality assurance	V 159	13.09.2017	09:00
Sensitivity analysis of QA procedures by failure injection in treatment plans	Helmut Schneider (Radio-Onkologie-Zentrum KSA-KSB, Switzerland); Denis Ovcari (Radio-Onkologie-Zentrum KSA-KSB, Switzerland)	Session 51	Radiation therapy V – Advanced quality assurance	V 160	13.09.2017	09:00

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Monte-Carlo simulation of proton treatments to support treatment planning and patient-specific quality assurance	Jan Eulitz (OncoRay – National Center for Radiation Research in Oncology, Germany); Benjamin Lutz (Helmholtz-Zentrum Dresden - Rossendorf, Germany); Hakan Oesten (OncoRay – National Center for Radiation Research in Oncology, Germany; Massachusetts General Hospital and Harvard Medical School, United States); Patrick Wohlfahrt (OncoRay – National Center for Radiation Research in Oncology, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Germany); Wolfgang Enghardt (OncoRay – National Center for Radiation Research in Oncology, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Germany; German Cancer Consortium (DKTK), partner site Dresden; German Cancer Research Center (DKFZ), Germany; Helmholtz-Zentrum Dresden - Rossendorf, Germany); Armin Lühr (OncoRay – National Center for Radiation Research in Oncology, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Germany; German Cancer Consortium (DKTK), partner site Dresden; German Cancer Research Center (DKFZ), Germany)	Session 51	Radiation therapy V – Advanced quality assurance	V 161	13.09.2017	09:00
Unification of patient dosimetry and quality control for CT and CBCT	Hugo de las Heras Gala (QUART GmbH, Germany; Helmholtz Zentrum München, Germany); Felix Schöfer (QUART GmbH, Germany); Roberto Sánchez-Casanueva (Instituto de Investigación Sanitaria del Hospital Clínico San Carlos (IdISSC), Spain); Katharina Mair (Strahlentherapie Süd, Germany); Bernhard Renger (University Hospital Rechts der Isar, Germany); Helmut Schlattl (Helmholtz Zentrum München, Germany)	Session 52	Dosimetry, radiation protection and radiation biology III	V 162	13.09.2017	09:00
Evaluation of the performance of the integral quality monitor	Sonja Wegener (Universitätsklinikum Würzburg, Germany); Barbara Herzog (Universitätsklinikum Würzburg, Germany); Otto A. Sauer (Universitätsklinikum Würzburg, Germany)	Session 52	Dosimetry, radiation protection and radiation biology III	V 164	13.09.2017	09:00
Detection of proton range variations in a clinical scenario via prompt gamma-ray timing	Theresa Werner (Helmholtz-Zentrum Dresden-Rossendorf, Germany); Johannes Petzoldt (Ion Beam Applications SA, Belgium); Katja Roemer (Helmholtz-Zentrum Dresden-Rossendorf, Germany); Johannes Berthold (Technische Universität Dresden, Germany); Andreas Rinscheid (Martin Luther Universität, Germany); Toni Koegler (Helmholtz-Zentrum Dresden-Rossendorf, Germany); Arno Straessner (Technische Universität Dresden, Germany); Wolfgang Enghardt (Helmholtz-Zentrum Dresden-Rossendorf, Germany; OncoRay – National Center for Radiation Research in Oncology, Germany; German Cancer Consortium (DKTK), partner site Dresden, and German Cancer Research Center (DKFZ), Germany); Guntram Pausch (Helmholtz-Zentrum Dresden-Rossendorf, Germany)	Session 52	Dosimetry, radiation protection and radiation biology III	V 165	13.09.2017	09:00
Computer-controlled analysis of solid state nuclear track detectors	Bernd Köhler (Karlsruhe Institute of Technology, Germany); Klaus-Martin Reichert (Karlsruhe Institute of Technology, Germany); Ingo Fesenbeck (Karlsruhe Institute of Technology, Germany); Christian Naber (Karlsruhe Institute of Technology, Germany); Stephan Allgeier (Karlsruhe Institute of Technology, Germany)	Session 52	Dosimetry, radiation protection and radiation biology III	V 166	13.09.2017	09:00
Computational fluid dynamics simulations and phase contrast-MRI validation of airflow in human pharynx during obstructive sleep apnea	Pragathi Gurumurthy (Universität zu Lübeck, Germany); Christina Hagen (Universität zu Lübeck, Germany); Patricia Ulloa (Universität zu Lübeck, Germany); Martin A. Koch (Universität zu Lübeck, Germany); Thorsten M. Buzug (Universität zu Lübeck, Germany)	Session 53	Modelling and simulation IV	V 167	13.09.2017	09:00
Effects of periodic inspiratory pressure patterns during variable controlled ventilation on recruitment and respiratory system mechanics – A numerical investigation	Robert Huhle (Universitätsklinikum Carl Gustav Carus, Germany); Jacob Herrmann (University of Iowa, United States); Marcelo Gama de Abreu (Universitätsklinikum Carl Gustav Carus, Germany); David W. Kaczka (University of Iowa, United States)	Session 53	Modelling and simulation IV	V 169	13.09.2017	09:00
CFD-analysis of contrast agent transport in coronary arteries and its impact on quantification of myocardial blood flow with bolus-based perfusion MRI measurements	Johannes Martens (University Hospital Wuerzburg, Comprehensive Heart Failure Center, Germany); Sabine Panzer (University Hospital Wuerzburg, Comprehensive Heart Failure Center, Germany); Jeroen Petrus van den Wijngaard (Academic Medical Center, Netherlands); Maria Siebes (Academic Medical Center, Netherlands); Laura Maria Schreiber (University Hospital Wuerzburg, Comprehensive Heart Failure Center, Germany)	Session 53	Modelling and simulation IV	V 170	13.09.2017	09:00
Simulation and development of a patient-specific carbon fiber forefoot prosthesis using finite element method	Muneer Gaashan (Hochschule Ulm, Germany); Thomas Engleder (Hochschule Ulm, Germany); Felix Capanni (Hochschule Ulm, Germany)	Session 53	Modelling and simulation IV	V 172	13.09.2017	09:00
4D treatment planning for lung tumours in particle therapy	Christian Graeff (GSI, Germany)	Session 55	Irradiation of thoracic tumours in particle therapy – Motion and modulation	FS 111	13.09.2017	09:00

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Experimental validation of an in-silico model for ion-beam modulation in lung parenchyma	Steffen Greilich (Heidelberg Institute of Radiation Oncology (HIRO), Germany; German Cancer Research Center (DKFZ), Germany); Riccardo Dal Bello (Heidelberg Institute of Radiation Oncology (HIRO), Germany; German Cancer Research Center (DKFZ), Germany); Oliver Jäkel (Heidelberg Institute of Radiation Oncology (HIRO), Germany; Heidelberg Ion Beam Therapy Center HIT, Germany; German Cancer Research Center (DKFZ), Germany); Christian Möhler (Heidelberg Institute of Radiation Oncology (HIRO), Germany; German Cancer Research Center (DKFZ), Germany)	Session 55	Irradiation of thoracic tumours in particle therapy – Motion and modulation	FS 112	13.09.2017	09:00
Considering bragg curve degradation due to lung-equivalent materials in Monte Carlo codes by applying a density modulation	Kilian-Simon Baumann (University Medical Center Giessen-Marburg, Germany; University of Applied Sciences, Germany); Matthias Witt (Marburg Ion-Beam Therapy Center (MIT), Germany); Uli Weber (GSI Helmholtzzentrum für Schwerionenforschung, Germany); Rita Engenhardt-Cabillic (University Medical Center Giessen-Marburg, Germany); Klemens Zink (University Medical Center Giessen-Marburg, Germany; University of Applied Sciences, Germany; Frankfurt Institute for Advanced Studies (FIAS), Germany)	Session 55	Irradiation of thoracic tumours in particle therapy – Motion and modulation	FS 113	13.09.2017	09:00
Methoden der Reichweitenmodulation für eine schnelle Bestrahlung thorakaler Tumore	Uli Weber (GSI Helmholtzzentrum für Schwerionenforschung GmbH, Germany); Yuri Simeonov (University of Applied Sciences THM, Germany); Toke Printz Ringbaek (University of Applied Sciences THM, Germany); Klemens Zink (University of Applied Sciences THM, Germany)	Session 55	Irradiation of thoracic tumours in particle therapy – Motion and modulation	FS 114	13.09.2017	09:00
Integration of piezoelectric transducers in well plates for broadband acoustic spectroscopy	Susan Walter (TU Dresden, Germany); Henning Heuer (TU Dresden, Germany; Faunhofer IKTS, Germany)	Session 56	Surface and volume functionalised BioCHiPs for adherent biomaterials	FS 117	13.09.2017	09:00
Integrierte Mikrosensorik für induktive-elektrische Breitband-Impedanzspektroskopie	Michael Iwanow (TU Dresden, Germany); Henning Heuer (TU Dresden, Germany)	Session 56	Surface and volume functionalised BioCHiPs for adherent biomaterials	FS 118	13.09.2017	09:00
Dose measurement in the steep dose gradients around brachytherapy sources	Frank W. Hensley (Ruprecht-Karls-Universität, Germany); Michael Andrassy (Eckert & Ziegler BEBIG GmbH, Germany); Ndimofor Chofor (Pius-Hospital Oldenburg und Carl-von-Ossietzky-Universität Oldenburg, Germany); Dietrich Harder (Georg-August-Universität, Germany); Günther Hartmann (Deutsches Krebsforschungszentrum (DKFZ), Germany); Theodor Kaulich (Universitätsklinik für Radioonkologie, Germany); Michael Kollefath (Klinik für Strahlenheilkunde, Germany); Michael Niekamp (Elekta GmbH, Germany); Björn Poppe (Pius-Hospital Oldenburg und Carl-von-Ossietzky-Universität Oldenburg, Germany); Thorsten Schneider (Physikalisch-Technische Bundesanstalt, Germany); Andreas Schönfeld (Pius-Hospital Oldenburg und Carl-von-Ossietzky-Universität Oldenburg, Germany); Edmund Schüle (Physikalisch-Technische Werkstätten Dr. Pychlau GmbH, Germany); Hans-Joachim Selbach (Physikalisch-Technische Bundesanstalt, Germany); Frank-Andre Siebert (Christian-Albrechts-Universität, Germany); Ulrich Quast (Universität Duisburg-Essen, Germany); Renate Walter (Klinikum Augsburg, Germany); Golam Abu Zakaria (Klinikum Oberberg, Germany)	Session 57	Dosimetry, radiation protection and radiation biology IV	V 173	13.09.2017	12:45
MR-μ-imaging based 3-dimensional-polymer gel dosimetry in comparison to 2D-film and 1D-diamond dosimetry of mm-sized photon pencil beams	Andreas Berg (Medical University of Vienna; Center for Medical Physics and Biomedical Engineering, Austria); Gerd Heilemann (Medical University of Vienna, Austria; MedicalUniversity of Vienna, Austria); Dietmar Georg (Medical University of Vienna, Austria; MedicalUniversity of Vienna, Austria)	Session 57	Dosimetry, radiation protection and radiation biology IV	V 175	13.09.2017	12:45
The influence of magnetic fields on the lateral dose response function of various photon dosimetry detectors	Björn Delfs (Universität Oldenburg, Germany); Dietrich Harder (Georg August University, Germany); Björn Poppe (Universität Oldenburg, Germany); Hui Khee Looe (Universität Oldenburg, Germany)	Session 57	Dosimetry, radiation protection and radiation biology IV	V 176	13.09.2017	12:45
Three-dimensional gel dosimetry for stereotactic radiosurgery of multiple brain metastases with helical tomotherapy	Thomas Rothe (Universitätsklinikum Freiburg, Germany); Giannoulla Sourmeli (Universitätsklinikum Freiburg, Germany); Rainer Saum (Universitätsklinikum Freiburg, Germany); Ute Ludwig (Universitätsklinikum Freiburg, Germany); Michael Bock (Universitätsklinikum Freiburg, Germany); Evangelos Pappas (Technological Educational Institute, Greece); Dimos Baltas (Universitätsklinikum Freiburg, Germany)	Session 57	Dosimetry, radiation protection and radiation biology IV	V 177	13.09.2017	12:45
Monitoring of cardiorespiratory signals using thermal imaging	Carina Barbosa Pereira (RWTH Aachen university, Germany); Michael Czaplik (University Hospital RWTH Aachen, Germany); Boudewijn Venema (RWTH Aachen university, Germany); Vladimir Blazek (RWTH Aachen university, Germany); Steffen Leonhardt (RWTH Aachen university, Germany); Daniel Teichmann (RWTH Aachen university, Germany)	Session 58	Imaging and image processing V – Miscellaneous	V 179	13.09.2017	12:45

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Thermography for perfusion analysis of the thoracic region after bypass grafting	Jens Müller (TU Dresden, Germany); Christian Thiele (TU Dresden, Germany); Antje Rost (TU Dresden, Germany); Imre Kukel (TU Dresden, Germany); Tamer Ghazy (TU Dresden, Germany); Stefan Rasche (TU Dresden, Germany); Christian Schnabel (TU Dresden, Germany); Juliane Müller (TU Dresden, Germany); Ronald Tetzlaff (TU Dresden, Germany)	Session 58	Imaging and image processing V – Miscellaneous	V 180	13.09.2017	12:45
Three-dimensional measurement of the blood flow in the umbilical cord using automated quantification of color doppler signals	Andreas Grundmann (ICM-Institut Chemnitzer Maschinen- und Anlagenbau e.V., Germany); Sebastian Walther (ICM-Institut Chemnitzer Maschinen- und Anlagenbau e.V., Germany); Thomas Scholbach (Chameleon Software GmbH, Germany); Jakob Scholbach (Chameleon Software GmbH, Germany)	Session 58	Imaging and image processing V – Miscellaneous	V 182	13.09.2017	12:45
Effect on 1-3 piezocomposite layout on resonance behavior of high-frequency ultrasonic transducers	Paul A. Günther (Fraunhofer IKTS, Germany); Holger Neubert (Fraunhofer IKTS, Germany); Sylvia Gebhardt (Fraunhofer IKTS, Germany)	Session 58	Imaging and image processing V – Miscellaneous	V 183	13.09.2017	12:45
Proton radiography for integrating positioning and treatment planning of small animals at an experimental proton beam	Johannes Müller (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Helmholtz-Zentrum Dresden - Rossendorf, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Institute of Radiooncology – OncoRay, Germany); Christian Neubert (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Helmholtz-Zentrum Dresden - Rossendorf, Germany; Brandenburg University of Technology Cottbus-Senftenberg, Germany); Cläre von Neubeck (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Helmholtz-Zentrum Dresden - Rossendorf, Germany; German Cancer Consortium (DKTK), partner site Dresden, Germany; German Cancer Research Center (DKFZ), Germany); Mechthild Krause (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Helmholtz-Zentrum Dresden - Rossendorf, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Institute of Radiooncology – OncoRay, Germany; German Cancer Consortium (DKTK), partner site Dresden, Germany; German Cancer Research Center (DKFZ), Germany; Department of Radiotherapy and Radiation Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Germany; National Center for Tumor Diseases (NCT), partner site Dresden, Germany); Wolfgang Enghardt (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Helmholtz-Zentrum Dresden - Rossendorf, Germany; Helmholtz-Zentrum Dresden - Rossendorf, Institute of Radiooncology – OncoRay, Germany; German Cancer Consortium (DKTK), partner site Dresden, Germany; German Cancer Research Center (DKFZ), Germany; Department of Radiotherapy and Radiation Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Germany); Rebecca Bütof (OncoRay – National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Helmholtz-Zentrum Dresden - Rossendorf, Germany; Department of Radiotherapy and Radiation Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden, Germany; National Center for Tumor Diseases (NCT), partner site Dresden, Germany)	Session 58	Imaging and image processing V – Miscellaneous	V 184	13.09.2017	12:45
Continuous sleep-apnea screening in an unattended home-setting	Simon Annaheim (Empa, Switzerland); Martin Camenzind (Empa, Switzerland); Otto Schoch (Kantonsspital St. Gallen, Switzerland); Martin Brutsche (Kantonsspital St. Gallen, Switzerland); Florent Baty (Kantonsspital St. Gallen, Switzerland); René Rossi (Empa, Switzerland)	Session 59	Biosignal processing and monitoring IV	V 185	13.09.2017	12:45
Detection of nightly snore events in OSA patients	Lisa Steinbrecher (Technische Hochschule Mittelhessen, Germany); Keywan Sohrabi (Technische Hochschule Mittelhessen, Germany); Nilab Taher (Technische Hochschule Mittelhessen, Germany); Schahab Moeri (Universitätsklinikum Gießen Marburg, Germany); Ulrich Koehler (Universitätsklinikum Gießen Marburg, Germany); Andreas Weissflog (Thora Tech GmbH, Germany); Volker Gross (Technische Hochschule Mittelhessen, Germany)	Session 59	Biosignal processing and monitoring IV	V 187	13.09.2017	12:45
Evaluation of patient compliance during BIPAP-ventilation	Florian Schudt (University of Applied Sciences, Germany); Keywan Sohrabi (University of Applied Sciences, Germany); Werner Seeger (University of Giessen and Marburg Lung Center (UGMLC), Germany); Andreas Weissflog (Thora Tech GmbH, Germany); Volker Gross (University of Applied Sciences, Germany)	Session 59	Biosignal processing and monitoring IV	V 188	13.09.2017	12:45

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Comparison of camera-based and contact based estimation of the respiratory rate	Fabian Schrumpf (Hochschule für Technik, Wirtschaft und Kultur Leipzig, Germany); Christoph Mönch (Hochschule für Technik, Wirtschaft und Kultur Leipzig, Germany); Bianca Reichard (Hochschule für Technik, Wirtschaft und Kultur Leipzig, Germany); Mirco Fuchs (Hochschule für Technik, Wirtschaft und Kultur Leipzig, Germany)	Session 59	Biosignal processing and monitoring IV	V 189	13.09.2017	12:45
Time-frequency representations of combined EEG and MEG recordings during NREM sleep	Tilman Sander-Thömmes (Physikalisch-Technische Bundesanstalt, Germany); Martin Glos (Charité, Germany); Alois Schlögl (IST Austria, Austria); Christian Veauthier (Charité, Germany)	Session 59	Biosignal processing and monitoring IV	V 191	13.09.2017	12:45
NPH patients in Bern – gold standard in therapy and its shortcomings	Christian Fung (Inselspital Bern, Switzerland)	Session 60	Normal pressure hydrocephalus – Model based analysis of pathogenesis and therapy options	FS 120	13.09.2017	12:45
FEM modelling for bioimpedance controlled monitoring of normal pressure hydrocephalus	Carlos Castelar (RWTH Aachen University, Germany); Steffen Leonhardt (RWTH Aachen University, Germany)	Session 60	Normal pressure hydrocephalus – Model based analysis of pathogenesis and therapy options	FS 123	13.09.2017	12:45
MRI flow measurements and what they tell us about hydrocephalus	Olivier Balédent (Université de Picardie Jules Verne, France)	Session 60	Normal pressure hydrocephalus – Model based analysis of pathogenesis and therapy options	FS 124	13.09.2017	12:45
From first ideas to technical feasibility	Gernot Echner (DKFZ, Germany); Armin Runz (DKFZ, Germany); Wibke Johnen (DKFZ, Germany); Matthias Borutta (DKFZ, Germany)	Session 61	Anthropomorphic phantoms in radiooncology	FS 125	13.09.2017	12:45
From imaging to a realistic model	Wibke Johnen (Deutsches Krebsforschungszentrum, Germany); Gernot Echner (Deutsches Krebsforschungszentrum, Germany); Armin Runz (Deutsches Krebsforschungszentrum, Germany); Matthias Borutta (Deutsches Krebsforschungszentrum, Germany)	Session 61	Anthropomorphic phantoms in radiooncology	FS 126	13.09.2017	12:45
Gels in radiation oncology	Armin Runz (Deutsches Krebsforschungszentrum, Germany); Wibke Johnen (Deutsches Krebsforschungszentrum, Germany); Matthias Borutta (Deutsches Krebsforschungszentrum, Germany); Gernot Echner (Deutsches Krebsforschungszentrum, Germany)	Session 61	Anthropomorphic phantoms in radiooncology	FS 127	13.09.2017	12:45
An anthropomorphic multimodality (CT/MRI) head phantom prototype for end-to-end tests in radiotherapy	Raya Roshana Gallas (Current working address: Physikalisch-Technische Bundesanstalt (PTB), Germany); Nora Hünemohr (Current working address: Ministry of Science, Research and the Arts, Germany); Armin Runz (German Cancer Research Center (DKFZ), Germany; Heidelberg Institute of Radiation Oncology (HIRO), National Center for Radiation Research in Oncology, Germany); Nina Isabelle Niebuhr (German Cancer Research Center (DKFZ), Germany; Heidelberg Institute of Radiation Oncology (HIRO), National Center for Radiation Research in Oncology, Germany); Oliver Jäkel (German Cancer Research Center (DKFZ), Germany; Heidelberg Institute of Radiation Oncology (HIRO), National Center for Radiation Research in Oncology, Germany); Steffen Greulich (German Cancer Research Center (DKFZ), Germany; Heidelberg Institute of Radiation Oncology (HIRO), National Center for Radiation Research in Oncology, Germany)	Session 61	Anthropomorphic phantoms in radiooncology	FS 128	13.09.2017	12:45
A patient similar phantom in adaptive radiotherapy	Mona Splinter (Deutsches Krebsforschungszentrum Heidelberg, Germany); Peter Häring (Deutsches Krebsforschungszentrum Heidelberg, Germany); Clemens Lang (Deutsches Krebsforschungszentrum Heidelberg, Germany); Wibke Johnen (Deutsches Krebsforschungszentrum Heidelberg, Germany); Nina Niebuhr (Deutsches Krebsforschungszentrum Heidelberg, Germany)	Session 61	Anthropomorphic phantoms in radiooncology	FS 129	13.09.2017	12:45
Use of an elastic anthropomorphic phantom for the evaluation of a new patient positioning device	Peter Häring (DKFZ, Germany); Javiera Godoy (DKFZ, Germany); Clemens Lang (DKFZ, Germany); Wibke Johnen (DKFZ, Germany); Armin Runz (DKFZ, Germany); Mona Splinter (DKFZ, Germany); Gernot Echner (DKFZ, Germany)	Session 61	Anthropomorphic phantoms in radiooncology	FS 130	13.09.2017	12:45
Clinical requirements for a new sensor system inside the ear for diagnostic applications in sleep medicine	Thomas Penzel (Charité Universitätsmedizin Berlin, Germany; International Clinical Research Center, St. Anne's University Hospital Brno, Czech Republic); Martin Glos (Charité Universitätsmedizin Berlin, Germany); Christoph Schöbel (Charité Universitätsmedizin Berlin, Germany); Ondrej Ludka (International Clinical Research Center, St. Anne's University Hospital Brno, Czech Republic); Ingo Fietze (Charité Universitätsmedizin Berlin, Germany)	Session 62	New techniques in biosignal analysis for detecting sleep-related respiratory disorders	FS 131	13.09.2017	12:45
Cardiorespiratory coupling in sleep apnea	Niels Wessel (Humboldt-Universität zu Berlin, Germany); Jan F Kraemer (Humboldt-Universität zu Berlin, Germany); Harald Krause (Humboldt-Universität zu Berlin, Germany); Maik Riedl (Humboldt-Universität zu Berlin, Germany); Thomas Penzel (Humboldt-Universität zu Berlin, Germany; Charité Universitätsmedizin Berlin, Germany); Jürgen Kurths (Humboldt-Universität zu Berlin, Germany)	Session 62	New techniques in biosignal analysis for detecting sleep-related respiratory disorders	FS 132	13.09.2017	12:45

Title	Authors (affiliation and country)	Session ID	Session	Abstract ID	Session date	Session start time
Analysis of tracheal sound signals for detection of sleep related breathing disorders	Martin Glos (Charité-Universitätsmedizin Berlin, Germany); Katharina Jelavic (Charité-Universitätsmedizin Berlin, Germany); Alexandra Günther (Charité-Universitätsmedizin Berlin, Germany); Thomas Penzel (Charité-Universitätsmedizin Berlin, Germany)	Session 62	New techniques in biosignal analysis for detecting sleep-related respiratory disorders	FS 133	13.09.2017	12:45
Pulse wave analysis provides additional CV risk information to polysomnography in sleep apnoea patients	Dirk Sommermeyer (Hochschule Mannheim, Germany; Universität Göteborg, Sweden); Martin Glos (Charité-Universitätsmedizin, Germany); Thomas Penzel (Charité-Universitätsmedizin, Germany); Ingo Fietze (Charité-Universitätsmedizin, Germany); Ding Zou (Universität Göteborg, Sweden); Jan Hedner (Universität Göteborg, Sweden); Joachim Ficker (Klinikum Nürnberg, Germany); Winfried J. Randerath (Krankenhaus Bethanien, Germany); Bernd Sanner (AGAPLESION BETHESDA Krankenhaus bH, Germany); Ludger Grote (Universität Göteborg, Sweden)	Session 62	New techniques in biosignal analysis for detecting sleep-related respiratory disorders	FS 135	13.09.2017	12:45