

RUSSIAN JOURNAL OF NUMERICAL ANALYSIS AND MATHEMATICAL MODELLING

EDITORS-IN-CHIEF

Valentin P. Dymnikov, Moscow

Yuri A. Kuznetsov, Houston/Moscow

MANAGING EDITOR

Yuri V. Vassilevski, Moscow

EDITORIAL BOARD

Valery I. Agoshkov, Moscow

Andrey A. Amosov, Moscow

Nikolay G. Iakovlev, Moscow

Igor E. Kaporin, Moscow

Georgy M. Kobelkov, Moscow

Gennady A. Mikhailov, Novosibirsk

Sergey I. Repin, St. Petersburg

Vladimir V. Shaidurov, Krasnojarsk

Yurii I. Shokin, Novosibirsk

Eugene E. Tyrtyshnikov, Moscow

DE GRUYTER

RUSSIAN JOURNAL OF NUMERICAL ANALYSIS AND MATHEMATICAL MODELLING provides English translations of selected new original Russian papers on the theoretical aspects of numerical analysis and the application of mathematical methods to simulation and modelling. The members of the editorial board, the most prominent Russian scientists in numerical analysis and mathematical modelling, select papers on the basis of their high scientific standard, innovative approach and topical interest.

All information regarding subscriptions, Open access, back volumes and orders is available online at www.degruyter.com/rjnamm.

ABSTRACTED/INDEXED IN Baidu Scholar · Cabell's Directory · Case · Clarivate Analytics: Journal Citation Reports/Science Edition; Science Citation Index Expanded; Web of Science · CNKI Scholar (China National Knowledge Infrastructure) · CNPIEC · EBSCO (relevant databases) · EBSCO Discovery Service · Elsevier: Compendex; Engineering Village; SCOPUS · Gale/Cengage · Genamics JournalSeek · Google Scholar · Inspec · J-Gate · JournalGuide · JournalTOCs · KESLI-NDSL (Korean National Discovery for Science Leaders) · Mathematical Reviews (MathSciNet) · Microsoft Academic · Naviga (Softweco) · Primo Central (ExLibris) · ProQuest (relevant databases) · Publons · ReadCube · SCImago (SJR) · Sherpa/RoMEO · Summon (Serials Solutions/ProQuest) · TDNet · Ulrich's Periodicals Directory/ulrichsweb · WanFang Data · WorldCat (OCLC) · Zentralblatt Math (zbMATH).

ISSN 0927-6467 · e-ISSN 1569-3988 · CODEN RJNMEH

RESPONSIBLE EDITOR Yuri V. Vassilevski, Institute of Numerical Mathematics, Russian Academy of Sciences, Gubkin str. 8, Moscow 119333, Russia.
E-Mail: journal@dodo.inm.ras.ru

JOURNAL MANAGER Denis Fractalossi, De Gruyter, Genthiner Straße 13, 10785 Berlin, Germany,
Tel: +49 (0)30 260 05-283, Fax: +49 (0)30 260 05-250.
E-Mail: denis.fractalossi@degruyter.com

RESPONSIBLE FOR ADVERTISEMENTS Claudia Neumann, De Gruyter, Genthiner Straße 13, 10785 Berlin, Germany,
Tel.: +49 (0)30 260 05-226, Fax: +49 (0)30 260 05-264,
E-Mail: anzeigen@degruyter.com

© 2018 Walter de Gruyter GmbH, Berlin/Boston

PRINTING Franz X. Stickle Druck und Verlag e.K., Ettenheim



Contents

Valery I. Agoshkov, Eugene I. Parmuzin, Natalia B. Zakharova, and Victor P. Shutyaev

Variational assimilation with covariance matrices of observation data errors for the model of the Baltic Sea dynamics — 149

Andrey Yu. Ambos and Gennadii A. Mikhailov

Numerically statistical simulation of the intensity field of the radiation transmitted through a random medium — 161

Dmitry S. Saburin and Tatiana G. Elizarova

Modelling the Azov Sea circulation and extreme surges in 2013-2014 using the regularized shallow water equations — 173

Natalya V. Tracheva and Sergey A. Ukhinov

Two-dimensional projection Monte Carlo estimators for the study of angular characteristics of polarized radiation — 187

Alexander Zlotnik

On the energy dissipative spatial discretization of the barotropic quasi-gasdynamics and compressible Navier–Stokes equations in polar coordinates — 199

