

Coordinators, Contributors, Sponsors and Acknowledgments

The Coordinators

The present book is collectively written by nineteen researchers whose names are recorded at the head of each chapter and given below. Coordination of this book has been done by Robin Kaiser, Michèle Leduc, and H  l  ne Perrin.

Robin Kaiser

Robin Kaiser is a research director at CNRS. He started his career in atomic physics at École normale supérieure with a PhD thesis under the supervision of Alain Aspect, in the group led by Claude Cohen-Tannoudji. He then did a postdoctoral stay at Harvard University in Gerald Gabrielse’s group, before joining Alain Aspect as a research fellow at CNRS to start a new activity in cold atoms at the Institut d’Optique. Since 1996, Robin Kaiser is heading the cold atoms team at the Institut de Physique de Nice. His research work focuses on light scattering by cold atoms, combining cold atom physics with mesoscopic physics, and localization of light and quantum optics. He has initiated studies of intensity correlations in astrophysics, taking up the historical studies of Hanbury–Brown and Twiss with the modern tools of quantum optics. He is also the director of the “Cold atoms” GDR (French research network) since its creation.



Michèle Leduc

Michèle Leduc is a research director emeritus at CNRS. Her career in atomic physics was mainly spent at the École normale supérieure in Paris, in the Laboratoire Kastler Brossel named after its founders Alfred Kastler (Nobel laureate in 1966) and Jean Brossel. In 1993 she joined the laser cooling team led by Claude Cohen Tanoudji, Nobel laureate in 1997. Her most recent research work focuses on Bose–Einstein condensates of metastable helium. She coordinated the outreach activities of SIRTEQ, the research network on quantum technologies in the Ile-de-France region up to late 2021. She is editor of science books for the CNRS and for EDP-Sciences. She was a member of the CNRS Ethics Committee (COMETS) from 2012 to 2021.

**Hélène Perrin**

Hélène Perrin is a research director at CNRS. She prepared a PhD thesis at the Laboratoire Kastler Brossel under the supervision of Christophe Salomon on laser cooling of atoms in an optical trap. She did a postdoctoral stay at the CEA on two-dimensional electron gases with Christian Glattli. She then was recruited as a research fellow by CNRS at the Laboratoire de physique des lasers at Paris Nord University, where she currently leads the BEC team. Her research focuses on Bose–Einstein condensates confined in radio frequency traps and more specifically on their superfluid properties. She teaches at the École normale supérieure and at the University of Paris. She is regularly invited to give lectures in international summer schools such as the Physics School at Les Houches. She coordinated the Quantum Simulation axis of the SIRTEQ network together with Pascal Simon and is a board member of the “Cold atoms” French research network. She is now head of QuanTip, the new research network on quantum technologies in Ile-de-France.

**The contributors**

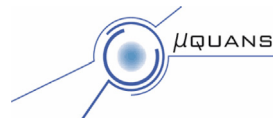
The researchers who wrote the different chapters of this book are: Baptiste Allard, Juliette Billy, Nadia Bouloufa-Maafa, Nicolas Cherroret, Daniel Comparat, Olivier Dulieu, Laurent Hilico, Vincent Josse, Robin Kaiser, Martina Knoop, Bruno Laburthe, Thierry Lahaye, Michèle Leduc, Hans Lignier, Jérôme Lodewyck, Franck Pereira dos Santos, Hélène Perrin, Goulven Quemener, Jakob Reichel. These researchers work in CNRS laboratories most of them associated to various universities. The coordinators thank all the authors for their kind cooperation to the present collective enterprise.

The sponsors

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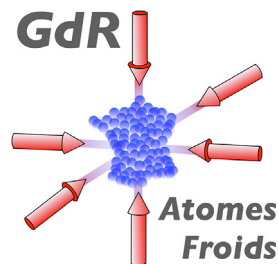
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Cold Atom GDR

The “Cold atoms” GDR network was created in 2012. This network of more than 20 laboratories across France coordinates activities in the field of cold atoms in France, structures the training of young PhD students, organizes meetings and conferences, distributes resources and contributes to the influence of the field.



LabEx FIRST-TF

The LABEX FIRST-TF (Network for Research, Innovation, Training, Services and Transfer in Time-Frequency) is a thematic network aiming to bring together all the players in the Time-Frequency field on a national scale (20 laboratories, 27 companies, 5 technical agencies and 5 other structures). It encourages the emergence of collaborative projects, with a wide range of applications, from fundamental physics to satellite positioning systems.



Acknowledgments

Special thanks go to Alain Aspect, Nobel laureate 2022, a major contributor to cold atom research, for agreeing to write a fascinating and well-documented preface tracing the evolution of the field over the past decades. The thanks of the coordinators and contributors also go to the following people: France Citrini, Pierre Cladé, Agnès Henri, Antoine Heidmann, Lucile Julien, Michel Le Bellac, Lucie Marignac, Christophe Westbrook.

