DESCRIPTION

Arising from a workshop, this book surveys the physics of ultracold atoms and molecules taking into consideration the latest research on ultracold phenomena, such as Bose Einstein condensation and quantum computing. Several reputed authors provide an introduction to the field, covering recent experimental results on atom and molecule cooling as well as the theoretical treatment.

ABOUT THE AUTHOR

Editors:

Matthias Weidemüller is head of the Laser Cooling Group at the Max-Planck-Institute for Nuclear Physics and Lecturer of Physics at the University of Heidelberg. After studying Physics in Bonn, Munich and Paris he attained his doctorate in 1995 at the Max-Planck-Institute for Quantum Optics. He spent two years as a Postdoc at the University of Amsterdam and the FOM-Institute for Atomic and Molecular Physics, before entering the Max-Planck-Institute for Nuclear Physics in Heidelberg. His group experimentally explores the physics of ultracold atomic and molecular gases in very different environments ranging from tiny optical traps to large-scale heavy-ion storage rings.

Claus Zimmermann is Professor for Experimental Physics at the University of Tübingen in Germany. In 1990 he attained his doctorate at the Max-Planck Institut for Quantum Optics in Munich in the research group of Prof. T. Hänsch. He was appointed
full Professor at the University of Tübingen in 1998. His scientific activities range from laser development, non-linear optics and precision spectroscopy to optical cooling and ultra cold quantum gases.

Authors:

Peter van der Straten, University of Utrecht, The Netherlands

John Weiner, Universiy Paul Sabatier, Toulouse, France

Allard Mosk, FOM, Rijnhuizen, The Netherlands

Klaus Sengstock, University of Hamburg, Germany

Eberhard Tiemann, University of Hannover, Germany

Rudi Grimm, University of Innsbruck, Austria

Phil Gould, University of Connecticut, USA

Giovanni Modugno, LENS, Florence, Italy

Daniel Comparat, Laboratory Aimé Cotton, Orsay, France

Daniel Zajfman, Weizmann Institute, Rehovot, Israel

Immanuel Bloch, University of Munich, Germany

Neill Claussen, JILA, Boulder, USA

Ben Sauer, SCOAP, Brighton, UK

Gerard Meijer, FOM Rijnhuizen, The Netherlands

To purchase this product, please visit https://www.wiley.com/en-us/9783527403899