Bad Honnef Physics School Supported by the Wilhelm and Else Heraeus-Foundation

Ultracold Atoms and Molecules

August 6 - 12, 2023, Physikzentrum Bad Honnef, Germany

Organised by

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Since the first Bose-Einstein condensate of ultracold atomic gases was realized experimentally in 1995, the emerging research field of ultracold quantum gases has been extremely active and has expanded in many different directions. In particular, new areas of research are forming at the borderlines between atomic and molecular physics, quantum optics, and condensed matter physics.

The main goal of the school is to provide a solid introduction to the field of ultracold quantum gases, which will be delivered by internationally recognized experts of the field.

Speakers and topics:

- Lauriane Chomaz (Heidelberg, Germany): Quantum gases of magnetic atoms
- André Eckardt (Berlin, Germany): Floquet engineering
- Tilman Esslinger (Zurich, Switzerland): Topological pumping
- Nathan Lundblad (Lewiston, USA): Ultracold atomic physics in microgravity
- Tilman Pfau (Stuttgart, Germany): Ultralong-range Rydberg molecules
- Thomas Pohl (Aarhus, Denmark): Rydberg-atom physics and technology

- Philipp Preiss (Garching, Germany): Pairing and Superfluidity in Ultracold Fermi Gases
- Helmut Ritsch (Innsbruck, Austria): Quantum gas cavity QED
- Jacques Tempere (Antwerpen, Belgium): Properties of Fermi superfluids in the BEC-BCS crossover
- Päivi Törmä (Aalto, Finland): Bose-Einstein condensation and topological photonics with plasmonic lattices

Fees: Covering full board and lodging at the Physikzentrum Bad Honnef $200 \notin (for DPG members 100 \notin).$

Application & more information: www.pbh.de



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