

Bad Honnef Physics School

Supported by the Wilhelm and Else Heraeus-Foundation

Frontiers of Quantum Mechanics

February 3 – 8, 2024 Physikzentrum Bad Honnef, Germany

Organised by

Markus Arndt (University of Vienna) & Claus Lämmerzahl (University of Bremen)

For PhD and Master Students

Topics and Lecturers

Postulates of Quantum Mechanics, measurement process, uncertainty relation, entanglement, quantum cryptography

Claus Lämmerzahl (University of Bremen)

High precision time and frequency measurement and its applications

Christian Lisdat (PTB Braunschweig)

Precision measurements at the quantum limit

Michèle Heurs (Leibniz University of Hannover)

Quantum Gases and Rydberg Molecules

Tilman Pfau (University of Stuttgart)

Quantum Imaging and Sensing

Markus Gräfe (Technical University of Darmstadt)

Quantum control of mechanical objects using superconducting circuits

Yiwen Chu (ETH Zurich)

Testing for gravity in quantum systems by optomechanics: Ideas & experimental challenges

Hendrik Ulbricht (University of Southampton)

Quantum Birds: a radical-pair magnetic compass mechanism

Peter Hore (University of Oxford)

Quantum Reference Frames and Quantum Causality

Caslav Brukner (University of Vienna)

Fees:

Covering full board and lodging at the Physikzentrum Bad Honnef
200 € (for DPG members 100 €).

Application & more information: www.pbh.de



Physikzentrum Bad Honnef

Deutsche Physikalische Gesellschaft



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