

HL 24: Quo Vadis Quantum Technologies? About Promises, Prospects, and Challenges

In 2016 the quantum satellite 'Micius' started its successful mission in space, and about a year ago, Google announced the achievement of reaching a quantum advantage with a quantum computer based on superconducting qubits. Both stories impressively illustrate the transition from basic research in quantum physics to applications of quantum technologies. In this light we will have a panel discussion on "Quo Vadis Quantum Technologies? About Promises, Prospects, and Challenges"

Time: Friday 13:30–15:00

Location: Audimax 2

Discussion HL 24.1 Fri 13:30 Audimax 2
Panel Discussion on Quantum Technologies — •TOBIAS HEINDEL¹ and DORIS REITER² — ¹Technische Universität Berlin — ²Universität Münster

The panel discussion brings together experts and young scientists of different communities to jointly discuss viewpoints on the second quantum revolution and quantum technologies. We will exchange our ideas and perspectives of the different fields and how they might develop. Beyond identifying urgent scientific questions, we also aim to discuss the potential impact on industry, politics, and society in general, and

to which extend we believe that these promises are realistic. The discussions will be moderated by the spokespersons of AGyouLeaP, Doris Reiter and Tobias Heindel. We invite in particular students and young researchers to join in and learn what to expect when they enter the field.

We are excited to welcome to the discussion panel: Jens Eisert (Freie Universität Berlin), Brian Gerardot (Heriot-Watt University), Tracy Northup (Universität Innsbruck), Simone Portalupi (Universität Stuttgart), Rupert Ursin (TBC, IQOQI Wien), Jian-Wei Pan (TBC, University of Science and Technology of China, Hefei)