



Quantum Materials in the Quantum Information Era

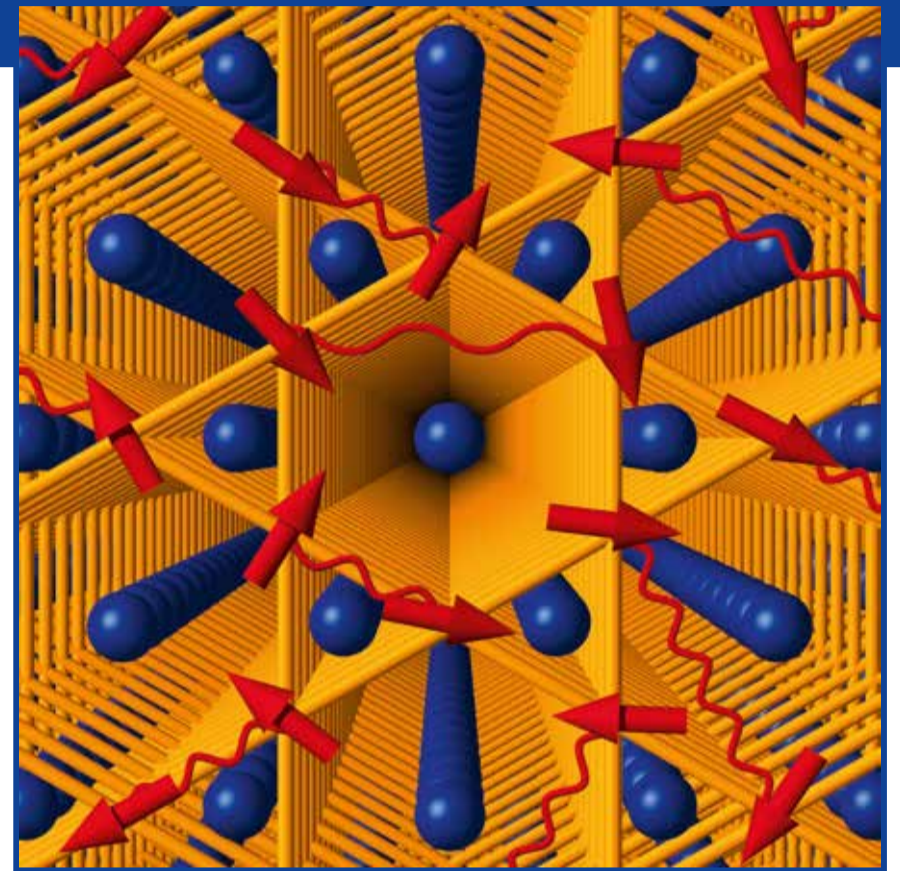
International Workshop 25 - 29 September 2023

This one week workshop will bring together communities working on topics in quantum materials potentially relevant to quantum information for an intense exchange. We will highlight the progress and prospects for advancement across a variety of quantum material platforms meant to promote exchange of ideas in this nascent area.

There will be nine sessions comprised of invited talks in quantum magnetism, 2D systems, and novel topological electronic systems including combined topics and recent developments. Junior participants will have the opportunity to present a poster as well as the chance to be selected for a contributed talk. Significant time is dedicated to discussion within the workshop.

Topics:

- Quantum Magnetism
- Probing Entanglement in Quantum Spin Systems
- Topology and Quantum Magnets
- Low-Dimensional Systems
- Edge Mode Entanglement
- Moiré Quantum Matter
- Novel Topological Electronic Systems
- Topological Superconductors
- Entanglement in Kondo Systems



Invited speakers: *to be confirmed

Peter Abbamonte (US)
Jason Alicea* (US)
Leon Balents (US)
Mitali Banerjee (CH)
Cristian Batista (US)
Andrei Bernevig (US)
Silke Bühler-Paschen (AT)
Claudia Felser (DE)
Rebecca Flint (US)
Elena Hassinger (DE)
Moty Heiblum* (IL)
Andrew Higginbotham (AT)
Haoyu Hu (ES)
Pablo Jarillo-Herrero (US)
Hae-Yong Kee (CA)
Philip Kim (US)
Johannes Knolle (DE)
Frank Koppens (ES)
Bella Lake (DE)
Yoshi Maeno (JP)

Michael Manfra (US)
Roderich Moessner (DE)
Martin Mourigal (US)
Raquel Queiroz (US)
Aline Ramires Neves de Oliveira (CH)
Lucile Savary (FR)
Ady Stern (IL)
Hidenori Takagi (DE)
Alan Tennant (US)
Nandini Trivedi (US)

Scientific coordinators:

Joseph Checkelsky
Cambridge, USA
Qimiao Si
Houston, USA
Roser Valentí
Frankfurt, Germany

Organisation:

Mandy Lochar
MPIPKS Dresden

Applications received before 30th June 2023 are considered preferentially.

We aim for an in-person workshop with all participants on-site.

Applications are welcome and should be made by using the application form on the event web page (see contact details on the right). The number of attendees is limited. The **registration fee** for the international workshop is 200 Euro and should be paid by all participants. Costs for **accommodation and meals** will be covered by the Max Planck Institute. Limited funding is available to partially cover **travel expenses**.

For further information please contact:

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