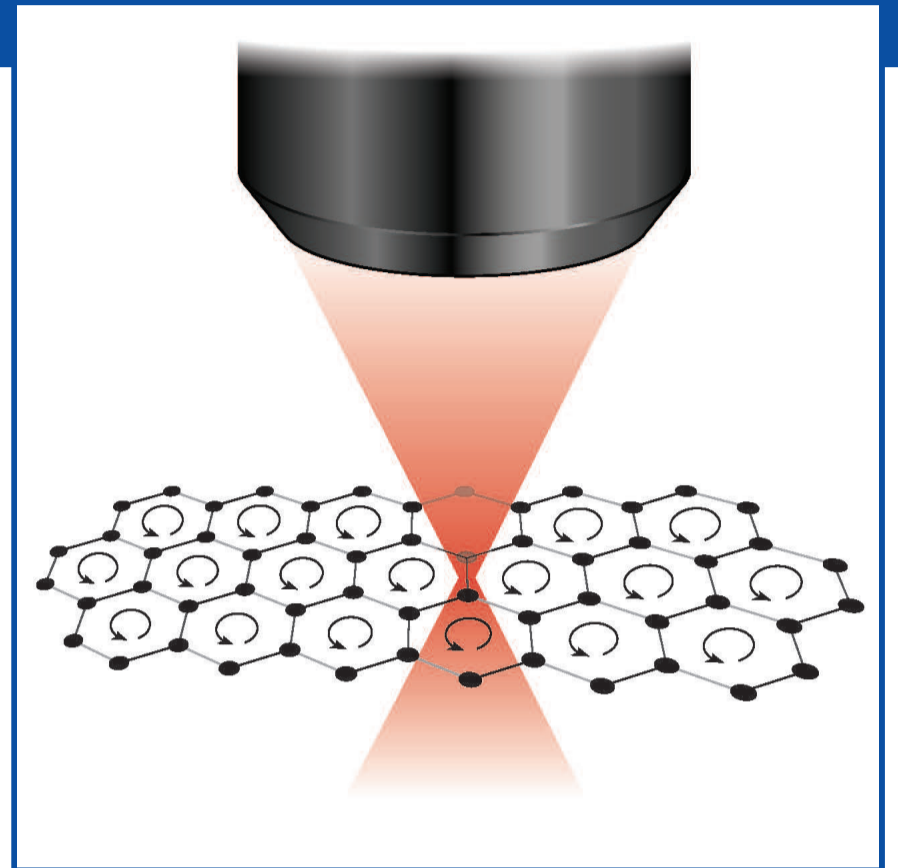




Topology and Non-Equilibrium Dynamics in Engineered Quantum Systems

International Workshop 10 Oct - 14 Oct 2022

The topological classification of states of matter on the one hand and the characterization of quantum systems far away from equilibrium on the other, are active and exciting subfields of modern quantum many-body physics. Recently, we have seen a number of remarkable discoveries at the crossroads between the two, regarding the topological characterization of systems far away from equilibrium. Many of these phenomena are already realized or are likely to find a realization in engineered quantum-many-body systems, such as atomic quantum gases in optical lattices, trapped ions, and driven-dissipative photonic systems such as superconducting circuits.



Topics:

- Floquet engineering of topological matter
- Anomalous Floquet topological systems
- Dynamical topological phase transitions
- Topological properties of dissipative quantum systems
- Non-equilibrium steady states and phase transitions
- Non-Hermitian topological band structures
- Higher-order topological insulators
- Non-equilibrium probes of topological matter
- Disordered and localized quantum systems
- Engineered quantum systems

Invited speakers:

Emil Bergholtz (SE)
 Jacqueline Bloch (FR)
 Iacopo Carusotto (IT)
 Nigel Cooper (UK)
 Tilman Esslinger (CH)
 Nathan Goldman (BE)
 Nathan Harshman (US)
 Atac Imamoglu (CH)
 Gyu-Boong Jo (HK)
 Gediminas Juzeliūnas (LV)
 Vedika Khemani (US)
 Roderich Moessner (DE)
 Anne Nielsen (DK)
 Nur Ünal (UK)
 Oded Zeitler (DE)
 Martin Zwierlein (US)

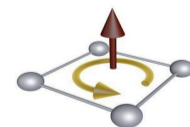
Scientific coordinators:

Monika Aidelsburger
 (Munich, Germany)
 André Eckardt
 (Berlin, Germany)
 Walter Hofstetter
 (Frankfurt, Germany)

Organisation:

Mandy Lochar,
 MPIPKS Dresden

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 DFG Research Unit FOR 2414



Applications received before 14th August 2022 are considered preferentially.

We plan for a **hybrid workshop** with a number of participants on-site and the others connected remotely. Online attendance will be possible in any case. However, oral and poster presentations will be restricted to on-site participants, unless on-site participation is limited strongly by the pandemic situation. The organizers will inform about possible limitations regarding on-site attendance at a later stage.

For on-site participation the registration fee is 140 Euro; costs for accommodation and meals will be covered by the Max Planck Institute. Limited funding is available to partially cover travel expenses.

No fee for remote participation.

For further information please contact:

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