



Localization: Emergent Platforms and Novel Trends

International Workshop 16 - 20 September 2024

Localization is a vibrant research field, with several subfields. The workshop will bring together scientists working on Anderson and many-body localization, including leading experts and young researchers, theorists and experimentalists, to discuss recent progress and prospective research directions. A particular focus will be put on emergent experimental platforms and novel directions in the field.



Topics

- Anderson transitions
- Localization in cold-atom systems
- Localization in topological matter
- Localization in non-Hermitian problems
- Measurement-induced transitions: Relation to localization
- Many-body localization (MBL)
- MBL transitions
- MBL in state-of-the-art quantum processors and simulators
- Novel computational approaches to Anderson localization and MBL
- Localization in strongly correlated systems
- Interplay of localization and superconductivity

Invited speakers

Dmitry Abanin (US)
 Alexander Altland (DE)
 Soumya Bera (IN)
 Fiona Burnell (US)
 John Chalker (UK)
 Anushya Chandran (US)
 Radu Chicireanu (FR)
 Marcel Filoche (FR)
 Matthew Foster (US)
 Sarang Gopalakrishnan (US)
 Markus Heyl (DE)
 Jonas Karcher (US)
 Stefan Kettemann (DE)
 Gabriel Lemarié (SG/FR)
 Roderich Moessner (DE)
 Adam Nahum (FR)
 Hideaki Obuse (JP)
 Tomi Ohtsuki (JP)
 Arijeet Pal (UK)
 Natalia Perkins (US)
 Jedediah Pixley (US)
 Igor Poboiko (DE)

Mikael Rechtsman (US)
 Maksym Serbyn (AT)
 Ryuichi Shindou (CN)
 Keith Slevin (JP)
 Christoph Strunk (DE)
 Marco Tarzia (FR)
 Romain Vasseur (US)
 Haohua Wang (CN)
 David Weld (US)
 Jakub Zakrzewski (PL)

Scientific coordinators

Ferdinand Evers
 Regensburg University
 Ilya A. Gruzberg
 Ohio State University
 Alexander Mirlin
 KIT Karlsruhe

Organisation

Claudia Domaschke
 MPIPKS Dresden

Applications received before 31st May 2024 are considered preferentially.

Applications are welcome and should be made by using the application form on the event's web page. 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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