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 Chirciu (FR)
Marcel Filoche (FR)
Matthew Foster (US)
Sarang Gopalakrishnan (US)
Markus Heyl (DE)
Jonas Karcher (US)
Stefan Kettermann (DE)
Gabriel Lemarié (SG/FR)
Roderich Moessner (DE)
Adam Nahum (FR)
Hideaki Obuse (JP)
Tomi Ohtsuki (JP)
Anjeet Pal (UK)
Natalia Perkins (US)
Jedediah Pixley (US)
Igor Poboiko (DE)
Mikael Rechtsman (US)
Maksym Serbyn (AT)
Ryichi Shindou (CN)
Keith Slevin (JP)
Christoph Strunk (DE)
Marco Tarzia (FR)
Romain Vasseur (US)
Hachua 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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We also offer individual fellowships (PhD, postdoc, sabbatical). Applications are accepted continuously. For details, please check www.pks.mpg.de/visitors