



MAX-PLANCK-GESELLSCHAFT

# Anderson Localization and Interactions

## International Workshop 24 - 28 September 2018

A focus of condensed matter research is on the interplay of Anderson localization and many-body effects – partially motivated by experiments that explore related phenomena, e.g., in topological materials, superconductors, and cold-atom traps. The workshop will unite experimentalists and theorists to discuss progress and perspectives.



### Topics

- Anderson localization transitions in non-interacting and interacting systems
- Superconductor-insulator transitions
- Disordered bosons, superfluid-Bose glass transition
- Many-body localization
- Anderson localization on random graphs modeling interacting systems
- Transport in disordered interacting quantum systems
- Localization and topology

### Invited speakers

\*to be confirmed

Dmitry Abanin (CH)  
 Alexander Altland (DE)  
 Ehud Altman (US)\*  
 Soumya Bera (IN)  
 Giulio Biroli (FR)  
 Immanuel Bloch (DE)  
 Hartmut Buhmann (DE)  
 Igor Burmistrov (RU)  
 Brian DeMarco (US)\*  
 Eugene Demler (US)  
 Wojciech de Roeck (BE)  
 Rui-Rui Du (US)  
 Sergej Flach (KR)  
 Matthew Foster (US)  
 Aviad Frydman (IL)  
 Ilya Gruzberg (US)  
 Victor Gurarie (US)  
 David Huse (US)\*  
 Aharon Kapitulnik (US)  
 Gabriel Lemarie (FR)  
 David Luitz (DE)  
 Mikhail Lukin (US)\*

Roderich Moessner (DE)  
 Christopher Monroe (US)  
 Rahul Nandkishore (US)  
 Tomi Ohtsuki (JP)  
 Siddarth Parameswaran (UK)  
 Dragana Popovic (US)  
 Antonello Scardicchio (IT)  
 Ulrich Schneider (UK)  
 Dan Shahar (IL)  
 Christoph Strunk (DE)  
 Konstantin Tikhonov (DE & RU)  
 Thomas Vojta (US)  
 Simone Warzel (DE)\*  
 Norman Yao (US)

### Scientific coordinators

Ferdinand Evers  
 Regensburg, DE

Alexander Mirlin  
 Karlsruhe, DE

### Organisation

Maria de Haas  
 MPIPKS Dresden

Applications received before 3 June 2018 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 120 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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