

# Workshop “Frontiers in physics of disordered and interacting quantum systems”

## Thursday, November 3

### Session 1

09:45-10:00: Opening

10:00-10:45: Peter Wölfle. *Quantum transport of fermions in random magnetic fields:  
The early years of ADM in Karlsruhe*

10:45-11:30: Yaroslav Blanter. *Chiral and quantum magnons*

11:30-11:45: **Coffee break**

11:45-12:30: Yan Fyodorov. *Resonances in wave reflection from a disordered medium:  
Nonlinear sigma-model approach*

12:30-13:15: Ferdinand Evers. *A Perspective on Many-Body Localization*

13:15-14:00: **Lunch**

### Session 2 – ELASTO-Q-MAT SFB TRR Colloquium

14:00-14:45: Elio König. *Symplectic topological Kondo effect*

14:45-15:30: Dmitry Bagrets. *Floquet simulators for topological surface states*

15:30-15:45: **Coffee break**

15:45-16:30: Bjoern Trauzettel. *Topological Burning Glass Effect*

16:30-17:15: Heiko Weber. *A look back at electron-electron interaction phenomena in metals,  
and implications for nanocontacts*

### Theory Colloquium (Lehmann-HS)

17:30-19:00: Yuval Gefen. *Physics at the Edge*

**Conference dinner: 19:30**

## Friday, November 4

### Session 3

09:45-10:30: Pavel Ostrovsky. *Electron transport in a weakly disordered Weyl semimetal*

10:30-11:15: Dmitri Gutman. *Thermoelectric transport in Weyl semimetals in the hydrodynamic regime*

11:15-12:00: Sam Carr. *One-dimensional non-interacting topological insulators with chiral symmetry*

12:00-13:00: **Lunch**

### Session 4

13:00-13:45: Ilya Gruzberg. *Anderson transitions, multifractality, and conformal invariance  
in arbitrary dimensions*

13:45-14:30: Konstantin Tikhonov. *Localization transition on random regular graphs with large  
connectivity and in many-body quantum dots*

14:30-15:30: John Chalker. *Many-body delocalisation as symmetry breaking*

### Physics Colloquium (Festkolloquium, Gaede-HS)

15:45-17:30: Felix von Oppen. *The rich world of subgap states in superconductors*

**Reception (Foyer Gaede-HS): 17:30**