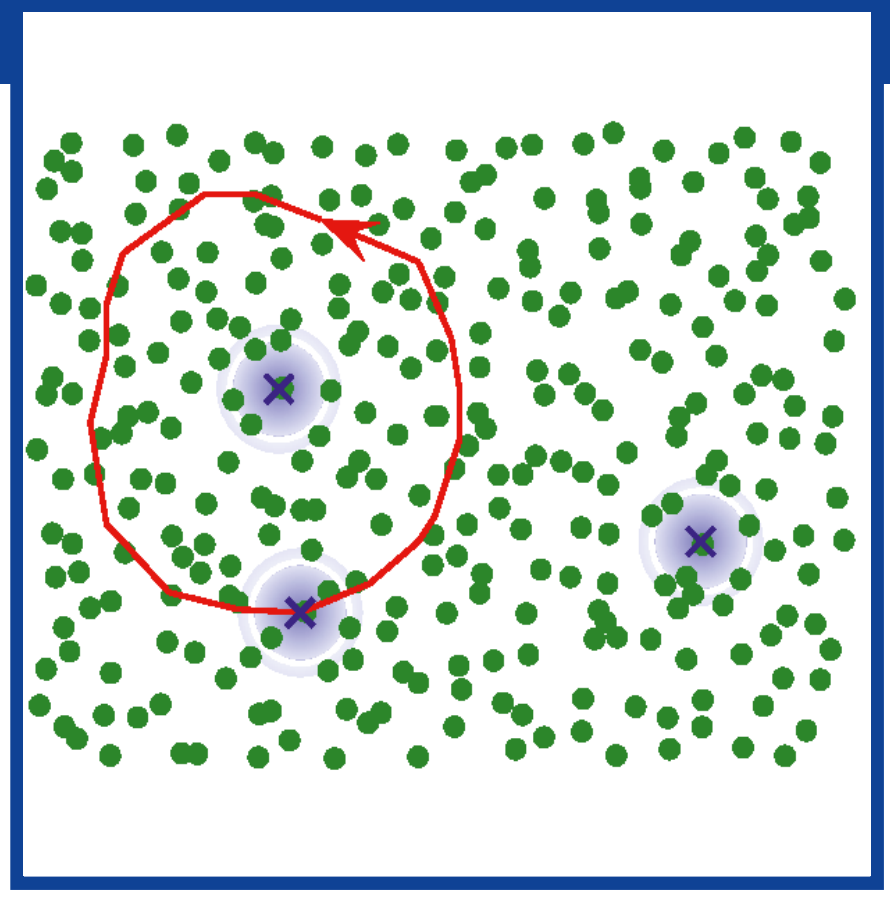
MAX-PLANCK-GESELLSCHAFT

mpipks

Anyons in Quantum Many-Body Systems

Max Planck Institute for the Physics of Complex Systems

International Workshop
21 - 25 January 2019



Topology has turned out to have a rich variety of realizations in quantum many-body systems. Key questions include understanding the physics of anyons, finding simple ways to realize anyons, and to demonstrate anyon braiding experimentally. The aim of the workshop is to bring together experts both in theory and experiment to discuss challenges and possibilities in the field.

Topics

- Topologically ordered phases
- Theoretical and experimental investigations of anyons
- Methods to create and detect anyons in experiments
- Exactly solvable anyon models
- Anyons in fractional quantum Hall systems
- Anyons in ultracold atoms
- Majorana bound states
- Anyon-like objects in three and higher dimensions
- Anyons in systems at nonzero temperature
- Thermodynamics in anyons

Invited speakers

Eddy Ardonne (SE)
Maissam Barkeshli (US)
Maria Hermanns (SE)
Michael A. Hermele (US)
Charles Kane (US)
Zhao Liu (CN)
Titus Neupert (CH)
Frank Pollmann (DE)
Norbert Schuch (DE)
German Sierra (ES)
Steven H. Simon (GB)
Ali Yazdani (US)

Scientific coordinators

Andrei Bernevig
Princeton, USA

Anne E. B. Nielsen
Dresden, Germany

Nicolas Regnault
Paris, France

Organisation

Katrin Lantsch
MPIPKS Dresden

Applications received before 30 September 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 140 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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