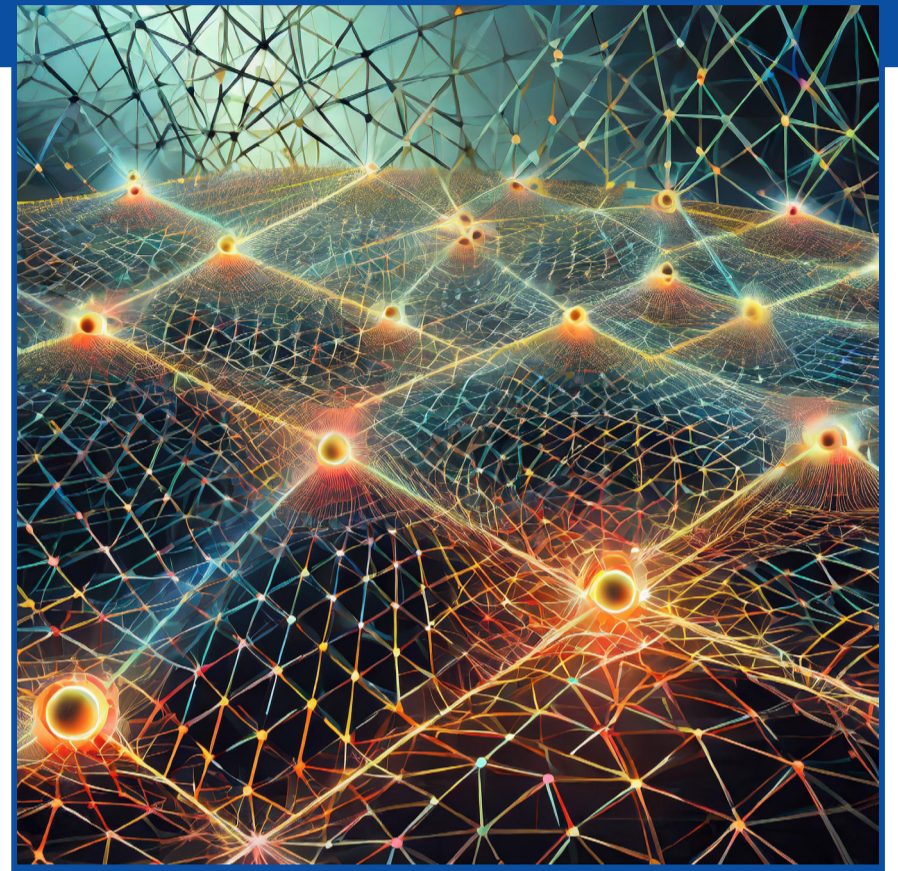




# Topological Quantum Matter in Magnetic and Synthetic Platforms

## International Workshop 08 - 12 July 2024

Topological quantum matter plays a central role in both modern condensed matter and quantum statistical physics and has many exciting applications including, potentially, quantum computation. This workshop will bring together researchers working on various fronts of topological quantum matter, both experimentally and theoretically, and stimulate interdisciplinary discussions and collaborations.



### Topics

- Topological states of matter
- Long-range quantum entanglement
- Frustrated magnetism
- Fractionalized excitations
- Experimental design and probe of topological states
- Gauge theory in many-body systems
- Synthetic many-body platforms
- Rydberg atom systems
- Quantum phases of matter
- Quantum dynamics

### Invited speakers

Owen Benton (UK) - tbc  
 Hans Peter Büchler (DE)  
 Bryce Gadway (US)  
 Bruce Gaulin (CA)  
 Philipp Gegenwart (DE)  
 Michel Gingras (CA)  
 Yasir Iqbal (IN)  
 Ludovic Jaubert (FR)  
 Yong Baek Kim (CA) - tbc  
 Thierry Lahaye (FR)  
 Christopher Laumann (US)  
 Julian Leonard (AT)  
 Igor Lesanovsky (DE)  
 Norbert Linke (DE)  
 Zi Yang Meng (HK)  
 Frank Pollmann (DE)  
 Johannes Reuther (DE)  
 Subir Sachdev (US)  
 Kirill Shtengel (US)  
 Romain Sibille (CH)- tbc  
 Nan Tang (DE)  
 Roser Valenti (DE)  
 Hui Zhai (CN)

### Scientific coordinators

Hannes Bernien  
 (Chicago, US)  
  
 Rhine Samajdar  
 (Princeton, US)  
  
 Han Yan  
 (Tokyo, JP)

### Organisation

Christina Kuß  
 MPIPKS Dresden

Applications received before 3 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 **travel funds** are available upon request.

#### For further information please contact:

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