



Comprehensive Course on Topology and Magnetism

Every Friday from 1 pm – 3 pm

- **Start: 16 April 2021**
- **End: 23 July 2021**
- **Speaker: see schedule, p. 2**
- **Please join via <https://zoom.us/j/92270036929>**

All lectures are digitally recorded and available online to participants as a video stream throughout the whole semester.

The course on Topology and Magnetism is offered by several researchers at MPI CPfS who all are involved in our world-leading research activities in this field.

The series of lectures is particularly targeted at PhD students and other junior researchers. As several scientists will give lectures on their respective research area, the course will offer a broad introduction into the field of topological materials and at the same time provide a great overview over the research activities at our institute in this field.

Schedule of the course:

- 16 April *Introduction and crystal structure* – Claudia Felser
- 23 April *From topological bonds and bands* – Claudia Felser
- 30 April *Topological Quantum Chemistry, single particle picture* – Maia Vergniory
- 7 May *Synthesis of topological crystals* – Chandra Shekhar
- 14 May *Transport Properties (Hall, anomalous Hall, chiral anomaly) exp.* – Chandra Shekhar
- 21 May *Transport properties theory (Berry curvature)* – Yan Sun
- 4 June *Quantum Hall effect* – Johannes Gooth
- 11 June *Magnetism and Topology exp.* – Claudia Felser
- 18 June *Topological Quantum Chemistry, magnetism, and correlations* – Maia Vergniory
- 25 June *Transport properties II theory (QHE and nonlinear transport)* – Yan Sun
- 2 July *Transport Properties II exp.* – Johannes Gooth
- 9 July *Topology, high energy physics and astrophysics* – Johannes Gooth
- 16 July *Light matter interaction and topology* – Fabian Menges
- 23 July *New fermions, chirality, and chemistry* – Claudia Felser

Details about the individual lectures will be announced [here](#).