



Symposium “Topological quantum chemistry and beyond”

October 27 - 28, 2022

Program

October 27

Chair: Prof. Dr. Liu Hao Tjeng

14:00 – 14:10	Seminar rooms 1-3	“Crowdsourced”, Combo der TU Big Band Dresden
14:10 – 14:20	Seminar rooms 1-3	Prof. Liu Hao Tjeng, MPI CPfS <i>Welcome</i>
14:20 – 14:40	Seminar rooms 1-3	Prof. B. Andrei Bernevig, Princeton University <i>Chemistry with Integers</i>
14:40 – 15:00	Seminar rooms 1-3	Prof. Maia Garcia-Vergniory, MPI CPfS <i>Topological materials data base</i>
15:00 – 15:20	Seminar rooms 1-3	Prof. Bernd Büchner, IFW Dresden <i>Two dimensional superconductivity in the type-I Weyl semimetal PtBi₂</i>
15:20 – 15:40	Seminar rooms 1-3	Prof. Barbara Albert, Universität Duisburg-Essen <i>Solids, Science and Society</i>
15:40 – 15:55	Seminar rooms 1-3	Dr. Uri Vool, MPI CPfS <i>Exploring Quantum Materials with Quantum Sensors</i>
15:55 – 16:25	Foyer	Photo and Coffee
16:25 – 16:35	Seminar rooms 1-3	“Crowdsourced”, Combo der TU Big Band Dresden
16:35 – 16:55	Seminar rooms 1-3	Prof. Burkard Hillebrands, TU Kaiserslautern <i>Magnon supercurrent transport and interference effects</i>
16:55 – 17:15	Seminar rooms 1-3	Prof. Dirk Johrendt, LMU München <i>Old hats newly discovered – on amazing simple compounds</i>
17:15 – 17:35	Seminar rooms 1-3	Prof. Leslie Schoop, Princeton University <i>The lesson taken from Claudia’s inorganic Chemistry 2 class and how it shaped my quantum materials research</i>
17:35 – 17:55	Seminar rooms 1-3	Prof. Ram Seshadri, University of California <i>Chemistry, Magnetism, and Superconductivity</i>

17:55 – 18:25	Seminar rooms 1-3	Prof. Aharon Kapitulnik, Stanford University <i>Symmetry breaking effects in topological superconductors</i>
18:25 – 18:45	Seminar rooms 1-3	Prof. Jürgen Gauß, Universität Mainz <i>High-Accuracy Quantum Chemistry: Interplay of Theory and Experiment</i>
18:45	Cafeteria	Dinner
20:00 – 20:10	Seminar rooms 1-3	“Crowdsourced”, Combo der TU Big Band Dresden
20:10 – 20:30	Seminar rooms 1-3	Prof. Anke Weidenkaff and Ronja Wagner-Wenz <i>After-dinner speech</i>

October 28

Chair: Prof. Dr. Liu Hao Tjeng

09:00 – 09:20	Seminar rooms 1-3	Prof. Wolfgang Tremel, Universität Mainz <i>Inorganic Minerals: From chiral templating to “green” emission-free cement</i>
09:20 – 09:40	Seminar rooms 1-3	Prof. Binghai Yan, Weizmann Institute of Science <i>Topological electrons in DNA-type chiral materials</i>
09:40 – 10:00	Seminar rooms 1-3	Prof. D. D. Sarma, Indian Institute of Science <i>In search of quantum spin liquids in unusual systems</i>
10:00 – 10:20	Seminar rooms 1-3	Dr. Niels Schröter, MPI für Mikrostrukturphysik <i>Chiral topological semimetals at the intersection of structural and electronic chirality</i>
10:20 – 10:50	Foyer	Coffee
10:50 – 11:10	Seminar rooms 1-3	Prof. Stuart Parkin, MPI für Mikrostrukturphysik <i>Chiral and topological spin textures</i>
11:10 – 11:30	Seminar rooms 1-3	Prof. Anke Weidenkaff, Fraunhofer IWKS <i>Green Innovations for a waste free world</i>
11:30 – 11:50	Seminar rooms 1-3	Prof. Amir Yacoby, Harvard University <i>Fractional Chern Insulators in Twisted Graphene</i>
11:50 – 12:10	Seminar rooms 1-3	Prof. Lucas Müchler, Penn State University <i>Topology in molecular systems and the friends we made along the way</i>
12:10 – 12:30	Seminar rooms 1-3	Prof. Susanne Stemmer, UC Santa Barbara <i>Topological Insulator States in Cadmium Arsenide Films</i>
12:30 – 12:50	Seminar rooms 1-3	Dr. Yu Pan, MPI CPfS Dresden <i>Thermoelectric performance in topological semimetals</i>
12:50 - 14:00	Cafeteria	Snacks