Program TOPO MAT Meeting

Monday • September 19, 2016

	8:30 a.m.	**Registration (with Coffee)**
UNI / Topological Spin Liquid	9:00 a.m. – 9:15 a.m.	**Hidenori Takagi** MPI for Solid State Research Stuttgart, Germany **Opening**
Topological Spin Liquid	9:15 a.m. – 9:50 a.m.	**Tomohiro Takayama** MPI for Solid State Research Stuttgart, Germany **New quantum spin liquid $H_3LiIr_2O_6$ and relevance to Kitaev physics**
Topological Spin Liquid	9:50 a.m. – 10:25 a.m.	**Maria Hermanns** University of Cologne, Germany **Quantum spin liquids and Majorana metals**
		Coffee
Topological Spin Liquid	10:45 a.m. – 11:20 a.m.	**Yong Baek Kim** University of Toronto, Canada **Quantum spin liquid in hyperkagome and hyperhoneycomb iridates**
	12:30 p.m. – 1:30 p.m.	**Walk to MPI & Lunch** **Poster & Coffee**
MPI / Topological Superconductivity I	1:30 p.m. – 2:05 p.m.	**Yoichi Ando** University of Cologne, Germany **Recent progress in experimental studies of topological insulators and superconductors**
Topological Superconductivity I	2:05 p.m. – 2:40 p.m.	**Masatoshi Sato** Kyoto University, Japan **Topological superconductivity in materials with strong spin-orbit coupling**
Topological Superconductivity I	2:40 p.m. – 3:15 p.m.	**Takeshi Mizushima** Osaka University, Japan **Topology and symmetry in unconventional superfluids and superconductors**
		Coffee
New Topological Materials	3:45 p.m. – 4:20 p.m.	**Claudia Felser** MPI for Chemical Physics of Solids Dresden, Germany **Topology – from the materials perspective**
New Topological Materials	4:20 p.m. – 4:55 p.m.	**Roderich Moessner** MPI for the Physics of Complex Systems Dresden, Germany **Dynamics of a topological spin liquid**
		Coffee
Special Topics	5:10 p.m. – 6:30 p.m.	**Yoshida Tsuneya** **Study of topological crystalline insulators with electron correlations** **Clifford Hicks** **Lifting Lattice Symmetries with Uniaxial Pressure** **Kentaro Kitagawa** **New spin liquids on honeycomb iridates as seen by NMR**
		Buffet (Dinner) / MPI tour / Discussions

Tuesday • September 20, 2016

MPI	8:30 a.m.	**Discussions (with Coffee)**
Topological Superconductivity II	9:00 a.m. – 9:35 a.m.	**Yoshiteru Maeno** Kyoto University, Japan **Current Topics on Ca_2RuO_4 and Sr_2RuO_4**
Topological Superconductivity II	9:35 a.m. – 10:10 a.m.	**Dirk Manske** MPI for Solid State Research Stuttgart, Germany **Novel Josephson and proximity effect using triplet superconductors**
		Coffee
Topological Superconductivity II	10:45 a.m. – 11:20 a.m.	**Andrew P. Mackenzie** MPI for Chemical Physics of Solids Dresden, Germany **Strain tuning of superconductivity in Sr_2RuO_4**
Topological Superconductivity II	11:20 a.m. – 11:55 a.m.	**Manfred Sigrist** ETH Zurich, Switzerland **Chiral superconductors - A closer look on some intriguing features**
	12:30 p.m. – 1:30 p.m.	**Lunch** **Poster & Coffee**
Topological Edge States I	1:30 p.m. – 2:05 p.m.	**Laurens Molenkamp** Würzburg University, Germany **Topological Physics in HgTe-based Quantum Devices**
Topological Edge States I	2:05 p.m. – 2:40 p.m.	**Koji Muraki** NTT Basic Research Laboratories, Japan **Engineering a quantum spin Hall insulator with InAs/GaSb type-II quantum wells**
Topological Edge States I	2:40 p.m. – 3:15 p.m.	**Markus Morgenstern** RWTH Aachen, Germany **Weak topological insulators: Status and perspectives**
		Coffee
Topological Edge States II	3:45 p.m. – 4:20 p.m.	**Toshimasa Fujisawa** Tokyo Institute of Technology, Japan **Non-equilibrium charge and spin dynamics in a quantum-Hall Tomonaga-Luttinger liquid**
Topological Edge States II	4:20 p.m. – 4:55 p.m.	**Atsushi Tsukazaki** Tohoku University, Japan **Quantum anomalous Hall effect in topological insulator Cr-doped $(Bi,Sb)_2Te_3$ heterostructures**
		Coffee
Special Topics	5:10 p.m. – 6:30 p.m.	**Aline Ramires** **Detrimental effects for multiband superconductivity** **Yuya Ominato** **Quantum transport in Dirac-Weyl semimetal magnetic junction** **Daichi Kurebayashi** **Charge-induced spin torque and voltage-driven magnetization dynamics in Weyl semimetals** **Masaki Tezuka** **Route to realize the Sachdev-Ye-Kitaev model in ultracold gases**
		Dinner

Wednesday • September 21, 2016

MPI	8:30 a.m.	**Discussions (with Coffee)**
Weyl and Dirac Systems	9:00 a.m. – 9:35 a.m.	**Satoshi Fujimoto** Osaka University, Japan **Torsional responses in Weyl semimetals and Weyl superconductors**
Weyl and Dirac Systems	9:35 a.m. – 10:10 a.m.	**Leslie Schoop** MPI for Solid State Research Stuttgart, Germany **Non-symmorphic Dirac materials**
		Coffee
Weyl and Dirac Systems	10:45 a.m. – 11:20 a.m.	**Elena Hassinger** MPI for Chemical Physics of Solids Dresden, Germany **Fermi surface topology and chirality in putative Weyl semimetals**
Weyl and Dirac Systems	11:20 a.m. – 11:55 a.m.	**Andreas Schnyder** MPI for Solid State Research Stuttgart, Germany **Three-dimensional topological Dirac materials**
	12:30 p.m. – 1:30 p.m.	**Lunch** **Poster & Coffee**
Weyl and Dirac Systems	1:30 p.m. – 2:05 p.m.	**Rajib Batabyal** Weizmann Institute of Science, Rehovot, Israel **Probing the topological Fermi-arcs via scattering processes in the Weyl semimetal TaAs**
Odd Parity Superconductivity, Cold Atom Systems	2:05 p.m. – 2:40 p.m.	**Koichi Izawa** Tokyo Institute of Technology, Japan **Nodal structures and Fermi surfaces in actinide superconductors**
Odd Parity Superconductivity, Cold Atom Systems	2:40 p.m. – 3:15 p.m.	**Yuki Kawaguchi** Nagoya University, Japan **Spin Hall effect in a spinor dipolar Bose-Einstein condensate**
		Coffee
Odd Parity Superconductivity, Cold Atom Systems	3:45 p.m. – 4:20 p.m.	**Tilman Pfau** University of Stuttgart, Germany **Dipolar quantum gases and liquids of ultracold magnetic atoms**
Topological Mott	4:20 p.m. – 4:55 p.m.	**Norio Kawakami** Kyoto University, Japan **Topological Mott insulators in one and two dimensions**
	4:55 p.m. – 5:10 p.m.	**Norio Kawakami** Kyoto University, Japan **Closing**
	5:10 p.m. – 6:30 p.m.	**Conference Dinner & Discussions**