Monday, Oct 21, 2019

Session Chair: Leon Balents (KITP)

8:50am Welcome to the KITP
9:00am Joel Moore (Berkeley) Optical response in topological semimetals
9:40am Kentaro Nomura (Tohoku U) Spintronics functionalities of topological semimetals
10:20am Coffee Break
10:50am Yuki Nagai (JAEA) Non hermitian physics in strongly correlated electron systems
11:30am Kazuhiro Kimura (Kyoto U) Interaction-driven symmetry protected exceptional torus with many-body chiral symmetry
11:50am Ella Lachman (Berkeley) Exchange biased Anomalous Hall Effect driven by frustration in a magnetic Kagome lattice
12:10pm Presenters{posters} Poster Previews
12:25pm Lunch Break

Session Chair: Yuki Shiomi (U Tokyo)

2:00pm Toshimasa Fujisawa (TUT) Non-equilibrium states in quantum Hall edge channels
2:40pm Koji Muraki (NTT BRL) Spin-orbit interaction and topological phase transition in 2D quantum wells
3:20pm Coffee Break
4:00pm Norio Kawakami (Kyoto U) Correlation effects in non-Hermitian fermionic systems
4:40pm Takase Shimizu (U of Tokyo) Landau-Zener mixing of spin-resolved quantum Hall edge channels
5:00pm Jong Yeon Lee (Harvard) Flat Band Physics in Twisted Double Bilayer Graphene
5:20pm

**SHUTTLE TO BWSCI**

### Tuesday, Oct 22, 2019

**Session Chair: Cenke Xu (UCSB)**

- **9:00am** Yukio Tanaka (Nagoya U) | Odd-Frequency Pairing in Topological superconductor
- **9:40am** Takafumi Sato (Tohoku U) | Exotic nodal fermions studied by ARPES
- **10:20am** Coffee Break
- **10:50am** Kate Ross (Colo State) | Partial Helical Order and Possible Skyrmion-like Topological Defects in Fe3PO4O3
- **11:30am** Shuntaro Sumita (Kyoto U) | Classification theory of topological crystalline gapless superconductivity
- **11:50am** Kazuki Yamamoto (Kyoto U) | Non-Hermitian fermionic superfluidity in dissipative ultracold atoms
- **12:10pm** Lunch Break

**Session Chair: Joel Moore (Berkeley)**

- **2:00pm** David Mandrus (U Tennessee) | New Kitaev Materials
- **2:40pm** Subir Sachdev (Harvard) | Thermal Hall effect in correlated materials
- **3:20pm** Coffee Break
- **3:50pm** Amir Yacoby (Harvard U) | Phase Controlled Topological Superconductivity
- **4:40pm** POSTER SESSION
- **5:30pm** COCKTAIL RECEPTION
- **6:00pm** DINNER
- **8:00pm** SHUTTLE TO BWSCI

### Wednesday, Oct 23, 2019

**Session Chair: Subir Sachdev (Harvard U)**

- **9:00am** Hae-Young Kee (U Toronto) | Exploring topology in van der Waals Mott insulators
- **9:40am** Masahito Ueda (U Tokyo) | Nonequilibrium many-body dynamics under measurement
- **10:20am** Coffee Break
- **10:50am** Nuh Gedik (MIT) | Time resolved probing of photoinduced phase transitions in charge density waves
<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:30am</td>
<td>Kazuaki Takasan (Berkeley)</td>
<td>Dielectric breakdown of strongly correlated insulators in one dimension</td>
</tr>
<tr>
<td>11:50am</td>
<td>Cécile Repellin (MIT)</td>
<td>Ferromagnetism in narrow bands of moiré superlattices</td>
</tr>
<tr>
<td>12:10pm</td>
<td></td>
<td><strong>Lunch Break</strong></td>
</tr>
</tbody>
</table>

**Session Chair: Hae-Young Kee (U Toronto)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:00pm</td>
<td>Jairo Sinova (U of Mainz)</td>
<td>The crystal Hall effect and topological spintronics in antiferromagnets</td>
</tr>
<tr>
<td>2:40pm</td>
<td>Atsushi Tsukazaki (Tohoku U)</td>
<td>Thin film devices based on topological materials</td>
</tr>
<tr>
<td>3:20pm</td>
<td></td>
<td><strong>Coffee Break</strong></td>
</tr>
<tr>
<td>3:50pm</td>
<td>Ryutaro Yoshimi (RIKEN)</td>
<td>Transport properties in MBE-grown (Sn1-xPbx)1-yInyTe thin films</td>
</tr>
<tr>
<td>4:30pm</td>
<td>Makoto Kohda (Tohoku U)</td>
<td>Spin orbit interaction in Rashba two dimensional system</td>
</tr>
<tr>
<td>5:10pm</td>
<td></td>
<td><strong>SHUTTLE TO BWSCI</strong></td>
</tr>
</tbody>
</table>

**Thursday, Oct 24, 2019**

**Session Chair: Masahito Ueda (U Tokyo)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00am</td>
<td>Takeshi Mizushima (Osaka U)</td>
<td>Fingerprints of Nematic and Weyl Superconductors</td>
</tr>
<tr>
<td>9:40am</td>
<td>Liang Fu (MIT)</td>
<td>Majorana in iron superconductors</td>
</tr>
<tr>
<td>10:20am</td>
<td></td>
<td><strong>Coffee Break</strong></td>
</tr>
<tr>
<td>10:50am</td>
<td>Yoichi Yanase (Kyoto U)</td>
<td>Topological superconductivity in UTe2 and UCoGe</td>
</tr>
<tr>
<td>11:30am</td>
<td>Andreas Schnyder (MPI-FKF)</td>
<td>Accidental and symmetry-enforced band crossings in topological materials</td>
</tr>
<tr>
<td>12:10pm</td>
<td></td>
<td><strong>Lunch Break</strong></td>
</tr>
</tbody>
</table>

**Session Chair: Liang Fu (MIT)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:00pm</td>
<td>Taylor Hughes (U Illinois)</td>
<td>Higher Order Topological Insulators</td>
</tr>
<tr>
<td>2:40pm</td>
<td>Joji Nasu (Yokohama U)</td>
<td>Magnetic-field effect and transport properties in Kitaev spin liquids</td>
</tr>
<tr>
<td>3:20pm</td>
<td></td>
<td><strong>Coffee Break</strong></td>
</tr>
<tr>
<td>4:00pm</td>
<td>Margaret Murnane (U Colorado)</td>
<td>Ultrafast Electron Calorimetry: Uncovering New States and Phases in Quantum Materials</td>
</tr>
<tr>
<td>4:40pm</td>
<td></td>
<td><strong>POSTER SESSION</strong></td>
</tr>
</tbody>
</table>
5:30pm  
COCKTAIL RECEPTION

6:00pm  
DINNER

8:00pm  
SHUTTLE TO BWSCI

Friday, Oct 25, 2019

Session Chair: Yoshiteru Maeno (Kyoto U)

9:00am John Pierre Paglione (UMD)  
Observation of topological superconductivity in UTe2

9:40am Taketomo Nakamura (U Tokyo)  
The Josephson effect on the multiterminal junctions of InAs two-dimensional electron systems

10:20am  
Coffee Break

10:50am Vidya Madhavan (U Illinois)  
Observation of Chiral edge modes in superconducting UTe2

11:30am Andrea Young (UCSB)  
Twisted bilayer graphene (placeholder title)

12:10pm  
Lunch Break

Session Chair: Satoshi Fujimoto (Osaka U)

2:00pm Philip Kim (Harvard U)  
Superconducting proximity in quantum Hall edge states

2:40pm Masatoshi Sato (Kyoto U)  
A unified view of non-Hermitian topological physics

3:20pm  
Organizers-wrap up

3:40pm  
SHUTTLE BACK TO BWSCI