

## Thursday, February 17th.

### Opening

09:30-09:40 Opening Remark, Announcement SHIBAUCHI, Takasada

### Session 1: New superconducting states

Chair : HANAGURI, Tetsuo

- 09:40-10:00 OKAZAKI, Kozo (University of Tokyo)  
“Superconducting-gap anisotropy of Fe(Se,S) investigated by laser ARPES”
- 10:00-10:20 EISAKI, Hiroshi (AIST)  
“Doping dependent critical current density for Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>8+δ</sub> single crystals”
- 10:20-10:40 OKAMOTO, Yoshihiko (Nagoya University)  
“Superconductivity in Layered Tellurides Nb<sub>2</sub>Pd<sub>3</sub>Te<sub>5</sub> and Chemically-Doped Ta<sub>2</sub>Pd<sub>3</sub>Te<sub>5</sub>”
- 10:40-11:00 KUDO, Kazutaka (Osaka University)  
“Superconductivity in Pt<sub>1+x</sub>Bi<sub>2</sub> with a stuffed CdI<sub>2</sub>-type structure”
- break ---
- 11:15-11:30 SUN, Yue (Southeast University)  
“Protonation-induced discrete superconducting phases in bulk FeSe single crystals”
- 11:30-11:45 HIROI, Zenji (University of Tokyo)  
“Possible Surface Superconductivity in NaAlSi”
- 11:45-12:05 KASAHARA, Shigeru (Okayama University)  
“Fulde-Ferrell-Larkin-Ovchinnikov pair liquid crystal state of FeSe”
- 12:05-12:20 MIZUSHIMA, Takeshi (Osaka University)  
“Pair Density Waves in Confined Superfluid <sup>3</sup>He”
- \*12:00-18:00 “Remo” trial time

**Session 2: Microscopy, Spectroscopy**

Chair : KASAHARA, Shigeru

- 13:30-13:50 HANAGURI, Tetsuo (RIKEN)  
“Quantum liquid crystals investigated by spectroscopic imaging scanning tunneling microscopy”
- 13:50-14:10 HIRORI, Hideki (Kyoto University)  
“Applications of high-field THz pulse to time-resolved STM”
- 14:10-14:30 TODA, Yasunori (Hokkaido University)  
“Coherent quench spectroscopy of superconductors using topological lightwaves”
- 14:30-14:45 ITOH, Hirotake (Tohoku University)  
“Ultrafast photocontrol of short- and long-range charge correlations in organic electronic ferroelectrics”
- 14:45-15:05 WADATI, Hiroki (University of Hyogo)  
“Ultrafast demagnetization in ferromagnetic thin films observed by time-resolved microscopy”
- 15:05-15:25 KIMURA, Tsuyoshi (University of Tokyo)  
“Visualization of ferroic domains by linear optical effects”
- 15:25-15:45 KOBAYASHI, Kensuke (University of Tokyo)  
“Development of Quantum Spin Microscope”

**Session 3: Superconductivity & theory**

Chair : EISAKI, Hiroshi

- 16:10-16:25 NOJIMA, Tsutomu (Tohoku University)  
“Nonreciprocal transport and two-fold symmetric superconductivity in electrostatically doped SrTiO<sub>3</sub>”
- 16:25-16:40 YANASE, Youichi (Kyoto University)  
“Nonreciprocal responses in superconductors: diode effect, Meissner effect, and nonlinear optics”
- 16:40-17:00 ARITA, Ryotaro (University of Tokyo / RIKEN)  
“Hyperuniform electron distributions in quasicrystal”
- 17:00-17:20 IKEDA, Hiroaki (Ritsumeikan University)  
“Progress in the first-principles calculations---crystal field level and Fermi surface”

FYR03 QLC meeting  
Program

- 17:20-17:40 SATO, Masahiro (Ibaraki University)  
“Control of spin current with heat and light”
- 17:40-17:55 AKAGI, Yutaka (University of Tokyo)  
“Spin nematic Skyrmions in quantum magnets”
- 17:55-18:10 ADACHI, Tadashi (Sophia University)  
“ $\mu$ SR Study of the Relationship between the Magnetism, Superconductivity, Electronic Nematicity in Iron-Chalcogenide Thin Films”

## Friday, February 18th.

### Poster Session

Chair : KIMURA, Tsuyoshi

- 08:30- “Remo” venue open
- 09:00- 1 min. Preview, using “Zoom”
- 10:20-12:20 Poster Presentation, using “Remo”  
10:20-11:20 = core time for odd poster numbers  
11:20-12:20 = core time for even poster numbers

### Session 4: Spin liquid, Kitaev

Chair : OHGUSHI, Kenya

- 13:30-13:50 SHIBAUCHI, Takasada (University of Tokyo)  
“Field-angle dependence of Majorana gap in a Kitaev spin liquid”
- 13:50-14:10 SATO, Taku J (Tohoku University)  
“Neutron Scattering study on magnetic structure and excitations in  $RuX_3$  ( $X = Br, I$ )”
- 14:10-14:30 SHANNON, Nic (OIST)  
“Connections between quantum spin liquids and quantum liquid crystals”
- 14:30-14:50 SHIMIZU, Yasuhiro (Nagoya University)  
“Anisotropic excitation in Kitaev quantum spin liquid candidates”
- 14:50-15:05 SASAKI, Takahiko (Tohoku University)  
“Inelastic neutron scattering experiments of quantum spin liquid molecular material ”
- 15:05-15:20 INOUE, Hisashi (AIST)  
“Tunneling spectroscopy of thin film antiferromagnetic kagome metal”
- 15:20-15:40 KONTANI, Hiroshi (Nagoya University)  
“Novel QLC states in Fe-based SCs, kagome metals, and magic angle twisted bilayer graphene”

**Session 5: Thermal & elastic properties**

Chair : SATO, Taku J

- 16:00-16:20 SHIMAKAWA, Yuichi (Kyoto University)  
“Giant entropy changes by charge transitions in oxides”
- 16:20-16:40 OHGUSHI, Kenya (Tohoku University)  
“Piezomagnetic Effect in Magnetic-multipole Order”
- 16:40-16:55 SHIOMI, Yuki (University of Tokyo)  
“Magnetic field dependence of piezoelectric effect in magnetite”
- 16:55-17:10 KAWASAKI, Takeshi (Nagoya University)  
“Emergent elasticity and topological phase transitions controlled via molecular chirality and steric anisotropy”
- 17:10-17:25 YONEZAWA, Shingo (Kyoto University)  
“Spontaneous strain measurements of quantum liquid crystals using fiber Bragg grating”
- 17:25-17:40 HOSOI, Suguru (Osaka University)  
“Elastoresistance in the Semimetal Bismuth”
- 17:40-17:55 MATSUNO, Jobu (Osaka University)  
“Spin-orbit torque generation in CoFeB-epitaxial SrIrO<sub>3</sub> bilayers”

## Saturday, February 19th.

### Session 6: Topological spin

Chair : KONTANI, Hiroshi

- 09:30-09:45 UCHIDA, Yoshiaki (Osaka University)  
“Mechanism of spin diffusion in liquid crystals”
- 09:45-10:05 ARIMA, Taka-hisa (University of Tokyo)  
“Transition between Helix and Ferromagnet”
- 10:05-10:25 TOGAWA, Yoshihiko (Osaka Prefecture University)  
“Chiral materials and macroscopic spin response”
- 10:25-10:45 MOTOME, Yukitoshi (University of Tokyo)  
“Phase shift in topological spin crystals”
- 10:45-11:00 KANAZAWA, Naoya (University of Tokyo)  
“Spin-orbit coupling properties in ferromagnetic-metal surface state of FeSi”
- 11:00-11:20 TOHYAMA, Takami (Tokyo University of Science)  
“Spin current texture in Hubbard models”
- 11:20-11:40 ISHIZAKA, Kyoko (University of Tokyo)  
“Unusual Phononic Phenomena in Correlated Materials”

### Closing

- 11:40- Winner announcement, QLC Young Researcher Award: WADATI, Hiroki  
Comments: Evaluation Committee Members  
Closing Remark: SHIBAUCHI, Takasada