

Monday, December 21st.

Opening Remark

8:50 SHIBAUCHI, Takasada

Session 1: Iron Chalcogenide

Chair : EISAKI, Hiroshi

9:00- 9:20 SHIBAUCHI, Takasada (University of Tokyo)

“Nematic quantum criticality and superconductivity”

9:20- 9:40 OKAZAKI, Kozo (University of Tokyo)

“BCS-BEC crossover controlled by electronic nematicity in FeSe_{1-x}S_x”

9:40-10:00 IKEDA, Hiroaki (Ritsumeikan University)

“Electronic structure in FeSe”

10:00-10:20 HANAGURI, Tetsuo (RIKEN)

“Spectroscopic-imaging STM studies of superconductivity and nematicity in Fe(Se,Te)”

10:20-10:35 SUN, Yue (Aoyama Gakuin University)

“Depairing J_c and its anisotropy of Fe(Te,Se) single crystals”

Session 2: Nematic Superconductivity

Chair : IKEDA, Hiroaki

10:50-11:05 HOSOI, Suguru (Osaka University)

“Elastoresistance in the nematic superconductor”

11:05-11:20 YONEZAWA, Shingo (Kyoto University)

“Coupling between nematic superconductivity and lattice distortion in Sr_xBi₂Se₃”

11:20-11:40 EISAKI, Hiroshi (AIST)

“Unique interplay between superconductivity and magnetism in EuRbFe₄As₄”

11:40-11:55 MIZUSHIMA, Takeshi (Osaka University)

“Pair density waves in superfluid ³He under nanoscale confinement”

“Remo” Trial time

13:30-15:30 *Trial time for using “Remo”

Tuesday, December 22nd.

Session 3: Spin Liquid

Chair : SATO, Masahiro

- 9:00- 9:20 OHGUSHI, Kenya (Tohoku University)
“Bandwidth and filling control of Kitaev spin liquid in RuCl₃”
- 9:20- 9:40 SATO, Taku J (Tohoku University)
“Crystal and Magnetic Structures of RuX₃ (X = Br, I), and Search for 2D Square-Lattice Compound Hosting Spin Nematic Phases”
- 9:40-10:00 SHIMIZU, Yasuhiro (Nagoya University)
“Nucleus probing quantum spin liquid and quantum Hall states”
- 10:00-10:15 AKAGI, Yutaka (University of Tokyo)
“Topological excitations and their dynamics in quantum spin nematics”
- 10:15-10:35 SHANNON, Nic (OIST)
“Numerical Simulation of Quantum Spin Nematics”

Session 4: New Technique

Chair : SATO, Taku J

- 10:50-11:10 SATO, Masahiro (Ibaraki University)
“Theoretical Proposals for Detecting Dynamical Features of Spin Nematic and Spin Liquid States with Laser”
- 11:10-11:30 KOBAYASHI, Kensuke (University of Tokyo / Osaka University)
“Non-linear Electron Transport Mediated by Electron-Magnon Interactions in Magnetic Tunnel Junction”
- 11:30-11:50 KIMURA, Tsuyoshi (University of Tokyo)
“Observation of ferroaxial domains using electrogyration”

Session 5: Poster Session

Chair : KOBAYASHI, Kensuke

- 13:30- 1 min. Preview, using “Zoom”
- 14:45- “Remo” open *Please end “Zoom” before starting “Remo”
- 15:00-17:00 Poster Presentation, using “Remo”
15:00-16:00 = core time for odd poster numbers, 16:00-17:00 = core time for even poster numbers

Wednesday, December 23rd.

Session 6: Novel Superconductor

Chair : KONTANI, Hiroshi

- 9:00- 9:20 OKAMOTO, Yoshihiko (Nagoya University)
“High-Mobility Carriers and Superconductivity Induced by Chemical Doping in the Candidate Nodal-Line Semimetal CaAgP”
- 9:20- 9:35 HIROI, Zenji (University of Tokyo)
“Surface states and superconductivity of the topological nodal-line semimetal NaAlSi”
- 9:35- 9:55 ARITA, Ryotaro (University of Tokyo / RIKEN)
“High Tc superconductivity in hydrogen compounds under high pressure”
- 9:55-10:10 ADACHI, Tadashi (Sophia University)
“Possible Chiral d-Wave Superconductivity in BaPtAs_{1-x}Sb_x with the Honeycomb Network”
- 10:10-10:30 KUDO, Kazutaka (Osaka University)
“Development of Superconductors with Ordered Laves Phase Structures”

Session 7: Liquid Crystal

Chair : ARITA, Ryotaro

- 10:50-11:10 KONTANI, Hiroshi (Nagoya University)
“Odd-parity density-wave orders with spontaneous currents in strongly correlated electron systems”
- 11:10-11:25 UCHIDA, Yoshiaki (Osaka University)
“Propagation of Intermolecular Interactions in Liquid Crystals”
- 11:25-11:40 KAWASAKI, Takeshi (Nagoya University)
“Melting Phenomena in Two-Dimensional Anisotropic Particles”

Thursday, December 24th.

Session 8: Quantum Liquid Crystal and Photons

Chair : HIRORI, Hideki

9:00- 9:15 ITOH, Hirotake (Tohoku University,)

“Anomalous temperature hysteresis and photoinduced dynamics of electronic-ferroelectric domain structures”

9:15- 9:35 TODA, Yasunori (Hokkaido University)

“Development of polarization-resolved coherent quench spectroscopy”

9:35- 9:55 TOHYAMA, Takami (Tokyo University of Science)

“Anisotropic Spin Dynamics in Photoexcited Two-Dimensional Mott Insulator”

9:55-10:10 SASAKI, Takahiko (Tohoku University)

“Nanoscale polarized clusters in a molecular dimer-Mott insulator as precursors of electronic ferroelectricity probed by conductance noise spectroscopy”

Session 9: New Technique

Chair : TOHYAMA, Takami

10:30-10:50 WADATI, Hiroki (University of Hyogo)

“Ultrafast photoinduced valence dynamics in $\text{EuNi}_2(\text{Si}_{0.21}\text{Ge}_{0.79})_2$ ”

10:50-11:10 HIRORI, Hideki (Kyoto University)

“Development of a time-resolved STM using a terahertz electric field pulse”

11:10-11:25 NOJIMA, Tsutomu (Tohoku University)

“Dielectric anomalies in transport properties of ion-gated SrTiO_3 ”

11:25-11:40 SHIOMI, Yuki (University of Tokyo)

“Observation of magneto-piezoelectric effect in magnetic metals”

11:40-11:55 MATSUNO, Jobu (Osaka University)

“Substrate strain effect on transport properties of SrIrO_3 thin films”

Friday, December 25th.

Session 10: Spin Liquid Crystal

Chair : MOTOME, Yukitoshi

- 9:00- 9:20 ISHIZAKA, Kyoko (University of Tokyo)
 “Nanoscale Imaging of Magnetic Skyrmions by nanosecond TEM”
- 9:20- 9:35 KANAZAWA, Naoya (University of Tokyo)
 “Giant anomalous Hall effect from spin chirality scattering in a chiral magnet”
- 9:35- 9:55 TOGAWA, Yoshihiko (Osaka Prefecture University)
 “Collective Dynamics of Chiral Spin Soliton Lattice”
- 9:55-10:15 ARIMA, Taka-hisa (University of Tokyo)
 “Electric and Magnetic Responses of Antiferromagnetic Helix”

Session 11: Exotic Spin Order

Chair : ISHIZAKA, Kyoko

- 10:35-10:55 MOTOME, Yukitoshi (University of Tokyo)
 “Spin Moire Superstructure”
- 10:55-11:15 SHIMAKAWA, Yuichi (Kyoto University)
 “Multi-k orthogonal spin ordering in CaFe₃Ti₄O₁₂”
- 11:15-11:30 YANASE, Youichi (Kyoto University)
 “Gauge invariant formulation of magnetic/electric quadrupole moment and its application”
- 11:30-11:50 KASAHARA, Shigeru (Kyoto University)
 “Bond directional anapole order in Sr₂Ir_{1-x}Rh_xO₄”

Winner announcement, QLC Young Researcher Award:

WADATI, Hiroki

Comments:

Evaluation Committee Members

Closing Remark:

SHIBAUCHI, Takasada