

# FYR04 QLC meeting Program

\* リモート発表者に **remote** を記載

**Thursday, December 8th.**

## Opening

13:00-13:05 Opening Remark, Announcement SHIBAUCHI, Takasada

## Session 1:

Chair : SHIMIZU, Yasuhiro

13:05-13:25 SHIBAUCHI, Takasada (University of Tokyo)  
“Enhanced Superconducting Pairing Strength near a Nematic Quantum Critical Point”

13:25-13:45 OKAMOTO, Yoshihiko (University of Tokyo)  
“Superconductivity in Ternary Scandium Tellurides with  $3d$ ,  $4d$ , and  $5d$  Transition Metals”

13:45-14:05 EISAKI, Hiroshi (AIST)  
“Competing order in 1144-type iron based superconductors”

14:05-14:25 IKEDA, Hiroaki (Ritsumeikan University) **remote**  
“Development of first-principles calculations and multipole correlations”

14:25-14:45 KASAHARA, Shigeru (Okayama University)  
“Puzzles of the superconducting state in tetragonal  $\text{FeSe}_{1-x}\text{S}_x$ ”

14:45-15:00 UCHIDA, Yoshiaki (Osaka University)  
“Shape control of materials using liquid crystals as reaction fields”

15:00-15:15 HIRAI, Daigorou (Nagoya University)  
“Novel molecular orbital crystal and possible liquid crystal state in  $\text{RuP}$ ”

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**Session 2:**

Chair : ARITA, Ryotaro

- 15:40-16:00 OHGUSHI, Kenya (Tohoku University)  
“Metal-insulator transition on honeycomb lattice”
- 16:00-16:20 OKAZAKI, Kozo (University of Tokyo) *remote*  
“HHG-laser-based time- and angle-resolved photoemission spectroscopy with wavelength-tunable excitation”
- 16:20-16:40 HIRORI, Hideki (Kyoto University) *remote*  
“Harmonic generation from nonlinear THz spin dynamics in antiferromagnets”
- 16:40-17:00 WADATI, Hiroki (University of Hyogo)  
“Time-resolved pump–probe measurements of ferromagnetic and antiferromagnetic thin films”
- 17:00-17:20 TODA, Yasunori (Hokkaido University)  
“Optical vortex induced spatio-temporally modulated superconductivity in a high- $T_c$  cuprate”
- 17:20-17:40 ARIMA, Taka-hisa (University of Tokyo) *remote*  
“Rotation Symmetry Breaking and Magnetic Skyrmion Lattice in  $\text{EuAl}_4$ ”
- 17:40-17:55 OKAMURA, Yoshihiro (University of Tokyo)  
“Observation of topological magneto-optical effect from skyrmion lattice”
- 17:55-18:10 UCHIDA, Masaki (Tokyo Institute of Technology)  
“Fabrication and control of  $\text{Sr}_3\text{Ru}_2\text{O}_7$  films by molecular beam epitaxy”

## Friday, December 9th.

### Poster Session:

Chair : KIMURA, Tsuyoshi

08:30- “Remo” venue open

09:00-10:00 1 min. Preview, using “Zoom”

10:00-12:00 Poster Presentation, using “Remo”

10:00-11:00 = core time for odd poster numbers

11:00-12:00 = core time for even poster numbers

### Session 3:

Chair : OKAMOTO, Yoshihiko

14:00-14:20 SHIMIZU, Yasuhiro (Nagoya University)

“Spin dynamics of quantum spin liquid crystals”

14:20-14:40 SHANNON, Nic (OIST)

*remote*

“Simulating the dynamics of quantum liquid crystals in spin-1 magnets”

14:40-15:00 MOTOME, Yukitoshi (University of Tokyo)

*remote*

“Spin nematics meet spin liquids: numerical study of the  $S=1$  Kitaev model with biquadratic interactions”

15:00-15:20 SHIMAKAWA, Yuichi (Kyoto University)

“Orthogonal antiferromagnetism in quadruple perovskites driven by hidden kagomé lattices”

15:20-15:40 KOBAYASHI, Kensuke (University of Tokyo)

“Physical properties measurement using diamond quantum sensors”

15:40-15:55 YONEZAWA, Shingo (Kyoto University)

“Symmetry breakings observed in quantum liquid crystals”

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**Session 4:**

Chair : OHGUSHI, Kenya

- 16:20-16:40 KIMURA, Tsuyoshi (University of Tokyo)  
“Antiferromagnetic domain imaging via linear magnetoelectric effect”
- 16:40-17:00 TOGAWA, Yoshihiko (Osaka Metropolitan University,)  
“Control of chiral spin response in chiral materials”
- 17:00-17:20 SATO, Masahiro (Chiba University) *remote*  
“Quantum Version of Uniaxial Chiral Ferromagnets”
- 17:20-17:40 ARITA, Ryotaro (University of Tokyo)  
“*Ab initio* search for functional magnets based on cluster multipole theory”
- 17:40-17:55 ONOSE, Yoshinori (Tohoku University)  
“Chirality-dependent spin current generation in a helimagnet”

## Saturday, December 10th.

### Session 5:

Chair : TOGAWA, Yoshihiko

- 09:30-09:50 HANAGURI, Tetsuo (RIKEN)  
“Search for novel electronic nematic states by spectroscopic-imaging STM”
- 09:50-10:10 SATO, Taku J (Tohoku University)  
“Magnetoelectric effect in  $\alpha$ - $\text{Cu}_2\text{V}_2\text{O}_7$ ”
- 10:10-10:30 ISHIZAKA, Kyoko (University of Tokyo) *remote*  
“Laser  $\mu$ ARPES study on atomically-thin transition-metal ditelluride flakes”
- 10:30-10:50 KONTANI, Hiroshi (Nagoya University)  
“Novel quantum liquid crystal states in recently discovered strongly correlated metals”
- 10:50-11:10 KUDO, Kazutaka (Osaka University) *remote*  
“Superconductivity in  $\text{BaPt}(\text{As}_{1-x}\text{Sb}_x)$  with honeycomb networks”
- 11:10-11:30 TOHYAMA, Takami (Tokyo University of Science)  
“Exciton-Assisted Anisotropic Low-Energy Spin Dynamics in Photoexcited Mott Insulators”
- 11:30-11:45 MATSUNO, Jobu (Osaka University)  
“Estimation of DM interaction at oxide interfaces”

### Closing

- 11:45- Winner announcement, QLC Young Researcher Award: WADATI, Hiroki  
Comments: Evaluation Committee Members  
Closing Remark: SHIBAUCHI, Takasada