

QLC, Quantum Materials Forum

Date & Time : Thursday, October 1, 2020 ~ Friday, October 2, 2020. each day 13:00-16:30

Place : online meeting using "Zoom"

Language : Japanese (Slides are in English.)

Lecture Time : Invited : 25 minutes for presentation + 5 minutes for questions
General : 15 minutes for presentation + 5 minutes for questions

Program

Thursday, October 1, 2020

Chair : KAN, Daisuke (Kyoto Univ.)

13:00-13:05 OHGUSHI, Kenya (Tohoku Univ.)

Opening

13:05-13:25 HIRAI, Daigorou (Univ. of Tokyo)

“Detection of multipolar orders in the 5d double-perovskite $\text{Ba}_2\text{MgReO}_6$ ”

13:25-13:45 ISHIDA, Shigeyuki (AIST)

“Interaction between magnetism and superconductivity in a magnetic superconductor $\text{EuRbFe}_4\text{As}_4$ ”

13:45-14:05 ONOSE, Masaho (Osaka Univ.)

“Clarification of spin/charge modulation in perovskite-type iron oxide $(\text{Sr}_{1-x}\text{Ba}_x)_{2/3}\text{La}_{1/3}\text{FeO}_3$ ”

14:05-14:25 SHIMIZU, Kotaro (Univ. of Tokyo)

“Spin Moiré engineering of emergent electromagnetism and topological transitions”

14:25-14:45 YAMAKAWA, Youichi (Nagoya Univ.)

“Microscopic theory of unconventional CDW in transition metal dichalcogenides”

14:45-15:00 break

Chair : AOYAMA, Takuya (Tohoku Univ.)

15:00-15:30 YAMAMOTO, Takafumi (Tokyo Tech.)

“Search for Novel Materials Focusing on Anion”

15:30-15:50 TAZAI, Rina (Nagoya Univ.)

“Theoretical Study for Microscopic Origin of Various Current Loop Phase”

15:50-16:10 KONDO, Masaki (Osaka Univ.)

“Spin-valley coupling sensitive to polar lattice distortion in layered Dirac antiferromagnet BaMnBi_2 ”

16:10-16:30 IMAI, Yoshinori (Tohoku Univ.)

“High-pressure synthesis of new Kitaev spin liquid candidate ruthenium halides”

Friday, October 2, 2020

Chair : HIRAI, Daigorou (Univ. of Tokyo)

- 13:00-13:20 IYO, Akira (ASIT)
“Structural phase transitions and superconductivity induced in antiper-ovskite phosphide CaPd_3P ”
- 13:20-13:40 YOKOYAMA, Yasunori (Nagoya Univ.)
“Negative thermal expansion of samarium monosulfide SmS induced by valence transition”
- 13:40-14:00 YAMADA, Rinsuke (Univ. of Tokyo)
“Quasi-one dimensional state in the quantum limit of correlated Dirac semimetal CaIrO_3 ”
- 14:00-14:20 KIMURA, Kenta (Univ. of Tokyo)
“Material development of magnetic quadrupolar antiferromagnet and discovery of nonreciprocal optical responses”
- 14:20-14:40 URATA, Takahiro (Nagoya Univ.)
“Search for Mn-pnictogen compounds that show novel transport phenomena due to locally broken inversion symmetry”
- 14:40-15:00 break

Chair : KIMURA, Kenta (Univ. of Tokyo)

- 15:00-15:30 KAN, Daisuke (Kyoto Univ.)
“Exploring spintronic properties in structurally engineered oxides”
- 15:30-15:50 MAYO, Alex Hiro (Osaka Univ.)
“Magnetic switching of band topology in a layered semimetal $\alpha\text{-EuP}_3$ ”
- 15:50-16:10 MATSUBARA, Shun (Nagoya Univ.)
“Theory of odd-frequency s-wave triplet superconductivity induced at edge of anisotropic superconductor”
- 16:10-16:30 NAKAJIMA, Masamichi (Osaka Univ.)
“Controlling physical properties of FeSe single crystals via biaxial strain”