

# Hokkaido University Department Seminar

## RIKEN Symposium “Experimental and Theoretical Applications of Spin-Resonance Techniques to Advanced Material Sciences”

### Program

Date May 25th, 2016

Place Room 5-201, Department of physics, Faculty of Science, Hokkaido University  
(Kita 10, Nishi 8, Kita-ku, Sapporo)

09:00-09:05 Greeting and purpose from RIKEN

I. Watanabe (RIKEN)

09:05-09:10 Greeting from Hokkaido Univ.

K. Nemoto (Hokkaido U.)

【Part-1】 Chairman: Y. Saito (Hokkaido U.)

09:10-09:40 Recent  $\mu$ SR applications to the solid state physics, experiments and computations

I. Watanabe (RIKEN)

09:40-09:55 ESR studies of the valence bond solid state

Sunghyun Kim (RIKEN)

09:55-10:10  $\mu$ SR Study on the Pyrochlore Iridates  $R_2Ir_2O_7$  (R= Nd, Sm)

R. Asih (Riken/Osaka U.)

10:10-10:25 Persistent chimera states in nonlocally coupled phase oscillators

Y. Suda (Hokkaido U.)

10:25-10:40 Induced Charge-Density-Wave in Cu-doped  $TaSe_3$

A. Nomura (Hokkaido U.)

10:40-10:55 Break

【Part-2】 Chairman: F. Astuti (RIKEN)

10:55-11:25 Observation of spin excitations in the quantum spin liquid state

Y. Oshima (RIKEN)

11:25-11:40 The Magnetic State of  $CeRu_2Al_{10}$

N. Adam (RIKEN/USM)

11:40-11:55 Intrinsic spatial dependence of superconducting gap in high-Tc cuprate  $Bi_2Sr_2CaCu_2O_{8+\delta}$ : an STM/STS study

Y. Shibata (Hokkaido U.)

11:55-12:10 Vortex-core charging due to the Lorentz force in a d-wave superconductor

H. Ueki (Hokkaido U.)

12:10-12:25  $\mu$ SR Study of Organic Superconductors  $\lambda$ -(BETS) $_2$ GaCl $_4$

D.P. Sari (RIKEN/Osaka U.)

12:30-13:30 Lunch

**【Part-3】** Chairman: D.P. Sari (RIKEN/Osaka U.)

- 13:30-14:00 Griffiths wings of electronic nematic phase transition  
H. Yamase (NIMS)
- 14:00-14:15  $\mu$ SR and DFT+U Studies of High-Tc Superconductor Cuprates  
D. Umar (RIKEN)
- 14:15-14:30  $^{13}\text{C}$  NMR study of nonmagnetic insulating phase of  $\lambda$ -(BEDT-STF) $_2$ GaCl $_4$   
Y. Saito (Hokkaido U.)
- 14:30-14:45 Magnetic property of a honeycomb ruthenate  $\alpha$ -RuCl $_3$  investigated by spin polarized muons  
Sungwon Yoon (RIKEN/CUK)
- 14:45-15:00 Magnetic Properties in Organic  $\pi$ -d System  $\lambda$ -(BEDT-STF) $_2$ FeCl $_4$   
T. Minamitate (Hokkaido U.)
- 15:00-15:15 Break

**【Part-4】** Chairman: Y. Shibata (Hokkaido U.)

- 15:15-15:30 Superconducting pairing gap due to orbital nematic fluctuations  
T. Agatsuma (NIMS)
- 15:30-15:45 Theory of magnetic Raman scattering in antiferromagnetic spin tubes  
T. Inoue (Hokkaido U.)
- 15:45-16:00 Magnetic properties of the molecular bi-layer materials  
Taehoon Lee (RIKEN)
- 16:00-16:15 Position calculation of muon and  $\mu$ SR in high Tc cuprate  
S.S.M. Tajudin (RIKEN/USM)
- 16:15-16:30 Magnetic Order of  $\pi$ -electrons in the Alkali Metal Superoxide of  $\text{CsO}_2$  studied by the Muon  
Spin Resonance  
F. Astuti (RIKEN)
- 16:30-16:45 Break
- 16:45-17:30 General discussion [regularizing the seminar]
- 17:30-(18:00) Closing  
A. Kawamoto (Hokkaido U.)
- 18:00-(.....) Banquet ( at Chuo Cafeteria )