

## Tuesday, 11 January

### Registration

8:30-10:00

### Opening

10:00-10:10 **Hikaru Kawamura (Osaka University)**

### Session A1

**Chair: S. Maegawa**

10:10-10:45 **Philippe Mendels (University of Paris-Sud) [A1-1]**

*Herbertsmithite: A quantum Heisenberg "spin liquid" on the Kagome network (invited)*

10:45-11:20 **Zenji Hiroi (University of Tokyo) [A1-2]**

*Novel magnetic orders in volborthite (invited)*

11:20-11:40 **Yoshihiko Okamoto (University of Tokyo) [A1-3]**

*Magnetization plateaus in spin-1/2 Kagome antiferromagnets: Volborthite and Vesignieite*

11:40-12:00 **Toru Sakai (Japan Atomic Energy Agency) [A1-4]**

*Quantum critical phenomena in magnetization process of the Kagome and triangular lattice antiferromagnets*

12:00-14:00 Lunch

14:00-15:30 Poster Session

### Session A2

**Chair: H. Kawamura**

15:40-16:15 **Pierre Bonville (CEA) [A2-1]**

*Phase diagram for  $Tb_2Ti_2O_7$  and  $Tb_2Sn_2O_7$  (invited)*

16:15-16:50 **Subir Sachdev (Harvard University) [A2-2]**

*Majorana liquids (invited)*

16:50-17:10 **Satoru Maegawa (Kyoto University) [A2-3]**

*NMR study of quantum spin liquid and its phase transition in the organic spin-1/2 triangular lattice antiferromagnet  $EtMe_3Sb[Pd(dmit)_2]_2$*

17:10-17:30 **Minoru Yamashita (Kyoto University) [A2-4]**

*Thermal-transport studies of quantum spin liquids*

## Wednesday, 12 January

### Session B1

Chair: S. Nakatsuji

- 9:00-9:35 **Daniel I. Khomskii (University of Köln) [B1-1]**  
*Orbitals, spin gaps and ‘‘partial Mott transition’’ in low-dimensional and frustrated systems (invited)*
- 9:35-10:10 **Hirokazu Tsunetsugu (University of Tokyo) [B1-2]**  
*Transport properties of electron systems on frustrated lattices (invited)*
- 10:10-10:40 Coffee Break

### Session B2

Chair: S. Onoda

- 10:40-11:15 **Sang-Wook Cheong (Rutgers University) [B2-1]**  
*Multiferroic vortices and graph theory (invited)*
- 11:15-11:50 **Taka-hisa Arima (Tohoku University) [B2-2]**  
*Interplay between magnetism and electricity in frustrated magnets (invited)*
- 11:50-12:10 **Yoshinori Onose (University of Tokyo) [B2-3]**  
*Ferroelectricity induced by spin-dependent metal ligand hybridization in  $BaCoGe_2O_7$*
- 12:10-14:00 Lunch
- 14:00-15:30 Poster Session

### Session B3

Chair: H. Ohta

- 15:40-16:15 **Michel Gingras (University of Waterloo) [B3-1]**  
*Collective Phenomena in the  $LiHo_xY_{1-x}F_4$  Quantum Ising Magnetic Material: Recent Progress and Open Questions (invited)*
- 16:15-16:35 **Hiroshi Kageyama (Kyoto University) [B3-2]**  
*Ferromagnetically Coupled Shastry-Sutherland Material*
- 16:35-16:55 **Takafumi Suzuki (University of Tokyo) [B3-3]**  
*Magnetic properties and exotic phase transition to a half plateau phase in a  $S=1/2$  XXZ model on Shastry-Sutherland lattices*
- 16:55-17:15 **Masayuki Hagiwara (Osaka University) [B3-4]**  
*Possibility of the field-induced spin-nematic phase in  $LiCuVO_4$*

## Thursday, 13 January

### Session C1

Chair: H. Aruga Katori

- 9:00-9:20 **Chisa Hotta (Kyoto Sangyo University) [C1-1]**  
*Quantum electric dipoles in spin liquid dimer-Mott insulator*
- 9:20-9:40 **Hajime Sagayama (Tohoku University) [C1-2]**  
*Stepwise N-I phase transitions due to charge frustration in a covalently-bonded donor/acceptor chain compound*
- 9:40-10:00 **Sumio Ishihara (Tohoku University) [C1-3]**  
*Orbital degree of freedom and frustration*
- 10:00-10:30 Coffee Break

### Session C2

Chair: H. Tsunetsugu

- 10:30-11:05 **Claudine Lacroix (CNRS-UJF) [C2-1]**  
*Frustration in the Kondo lattice: local versus extended singlet phase (invited)*
- 11:05-11:40 **Satoru Nakatsuji (University of Tokyo) [C2-2]**  
*Spin liquids and quantum criticality in 4f electron based Kondo lattice systems (invited)*
- 11:40-12:00 **Yukitoshi Motome (University of Tokyo) [C2-3]**  
*Emergent order in frustrated Kondo lattice systems*
- 12:00-14:00 Photo Session & Lunch

### Session C3

Chair: Y. Motome

- 14:00-14:35 **Cristian Daniel Batista (Los Alamos National Laboratory) [C3-1]**  
*Spontaneous quantum Hall effect in frustrated magnets (invited)*
- 14:35-15:10 **Yoshinori Tokura (University of Tokyo) [C3-2]**  
*Skymion crystals and topological transport phenomena (invited)*
- 15:10-15:30 **Shigeki Onoda (RIKEN) [C3-3]**  
*Intrinsic skyrmion Hall effect in two-dimensional relativistic double-exchange ferromagnets*
- 15:30-15:50 **Satoshi Fujimoto (Kyoto University) [C3-4]**  
*Hall effect, Righi-Leduc effect, and Ettingshausen effect of spin waves in frustrated magnets*
- 16:00- Excursion and Banquet

## Friday, 14 January

### Session D1

Chair: **Z. Hiroi**

- 9:00-9:35 **Bruce D. Gaulin (McMaster University) [D1-1]**  
*Phase transitions in planar pyrochlores (invited)*
- 9:35-10:10 **Collin Broholm (The Johns Hopkins University) [D1-2]**  
*Continuous magnetic excitation spectrum in the triangular lattice spin-1 antiferromagnet  $\text{NiGa}_2\text{S}_4$  (invited)*
- 10:10-10:40 Coffee Break

### Session D2

Chair: **K. Ohwada**

- 10:40-11:15 **Zuo-Guang Ye (Simon Fraser University) [D2-1]**  
*Compositional disorder, polar nanoregions and dipole dynamics in  $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ -based relaxor ferroelectrics (invited)*
- 11:15-11:50 **Guangyong Xu (Brookhaven National Laboratory) [D2-2]**  
*Probing local polar structures in PZN-xPT and PMN-xPT relaxor ferroelectrics using neutron and x-ray scattering (invited)*
- 11:50-12:10 **Shigeo Mori (Osaka Prefecture University) [D2-3]**  
*Multiple Domain Structures in the morphotropic phase boundary region of  $(1-x)\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ -xPbTiO<sub>3</sub>*
- 12:10-14:00 Lunch

### Session D3

Chair: **T. Arima**

- 14:00-14:20 **Tsutomu Momoi (RIKEN) [D3-1]**  
*Variational Monte Carlo study of spin nematic states in square lattice frustrated ferromagnets*
- 14:20-14:55 **Masaki Azuma (Tokyo Institute of Technology) [D3-2]**  
*Frustrated  $S=3/2$  honeycomb antiferromagnet  $\text{Bi}_3\text{Mn}_4\text{O}_{12}(\text{NO}_3)$  (invited)*
- 14:55-15:30 **Hikaru Kawamura (Osaka University) [D3-3]**  
*Spin liquid and novel order in two-dimensional frustrated Heisenberg antiferromagnets (invited)*

### Closing Remark

- 15:30-15:40 **Hikaru Kawamura (Osaka University)**

## ICFCM (Time Table)

Tuesday, 11 Jan.	Wednesday, 12 Jan.	Thursday, 13 Jan.	Friday, 14 Jan.
8:30-10:00 <b>Registration</b>	9:00-10:10 <b>Session B1</b>  D. Khomskii H. Tsunetsugu	9:00-10:00 <b>Session C1</b>  C. Hotta H. Sagayama S. Ishihara	9:00-10:10 <b>Session D1</b>  B. Gaulin C. Broholm
10:00-10:10 <b>Opening</b> H. Kawamura	10:10-10:40 Coffee	10:00-10:30 Coffee	10:10-10:40 Coffee
10:10-12:00 <b>Session A1</b>  P. Mendels Z. Hiroi Y. Okamoto T. Sakai	10:40-12:10 <b>Session B2</b>  S.-W. Cheong T. Arima Y. Onose	10:30-12:00 <b>Session C2</b>  C. Lacroix S. Nakatsuji Y. Motome	10:40-12:10 <b>Session D2</b>  Z.-G. Ye G. Xu S. Mori
12:00-14:00 Lunch	12:10-14:00 Lunch	12:00-14:00 Photo Session & Lunch	12:10-14:00 Lunch
14:00-15:30 <b>Poster</b>	14:00-15:30 <b>Poster</b>	14:00-15:50 <b>Session C3</b>  C. D. Batista Y. Tokura S. Onoda S. Fujimoto	14:00-15:30 <b>Session D3</b>  T. Momoi M. Azuma H. Kawamura
15:40-17:30 <b>Session A2</b>  P. Bonville S. Sachdev S. Maegawa M. Yamashita	15:40-17:15 <b>Session B3</b>  M. Gingras H. Kageyama T. Suzuki M. Hagiwara	16:00- Excursion & Banquet	15:30-15:40 <b>Closing</b> H. Kawamura
			invited talk contributed talk