Day 1 : Thursday, January 23

09:30-10:00 Registration

10:00-12:00 Session: 1 *Chair: N. Nagaosa*

10:00-10:30 Th01 **S. Maekawa** *(ASRC, JAEA)*
"Theory of spin current generation"

10:30-11:00 Th02 **S. Hoshino** *(Univ. of Tokyo)*
"Odd-frequency superconductivity induced by multi-channel Kondo effect"

11:00-11:30 Th03 **M. Ogata** *(Univ. of Tokyo)*
"Spin Hall effect and large diamagnetism of Dirac electrons"

11:30-12:00 Th04 **Y. Bang** *(Chonnam Natl. Univ.)*
"Renormalization of the Specific Heat Coefficient and the Density of States in the Interacting Fermion Systems"

12:00-13:30 Lunch Break

13:30-15:30 Session: 2 *Chair: A. Furusaki*

13:30-14:00 Th05 **T. Shibauchi** *(Kyoto Univ.)*
"Quantum criticality in iron-pnictide superconductors"

14:00-14:30 Th06 **H. Tsunetsugu** *(ISSP, Univ. of Tokyo)*
"Exotic divergence of quadrupole susceptibility in an orbital order state"

14:30-15:00 Th07 **F. C. Zhang** *(Univ. of Hong Kong* 2014/1～ Zhejiang Univ.)*
"Localized States and Quantum Spin Hall Effect in Si-Doped InAs/GaSb Quantum Wells"

15:00-15:30 Th08 **N. Kawakami** *(Kyoto Univ.)*
"Correlation effects in artificially layered Kondo superlattices"

15:30-16:00 Break

16:00-17:30 Session: 3 *Chair: N. Kawakami*

16:00-16:30 Th09 **K. T. Law** *(HKUST)*
"Inducing Correlated Spin Currents using BDI class Topological Superconductors"

16:30-17:00 Th10 **Y. Tanaka** *(Nagoya Univ.)*
"Theory of superconducting topological insulator"

17:00-17:30 Th11 **A. Furusaki** *(RIKEN CEMS)*
"Stability of surface Dirac fermions against disorder"

09:30-10:00 Registration

10:00-12:00 Session: 4 *Chair: F. C. Zhang*

10:00-10:30 Fr01 **J. Yu** *(Seoul Natl. Univ.)*
"Physics of J=1/2 State in 5d Transition Metal Oxides"

10:30-11:00 Fr02 **O. Sugino** *(ISSP, Univ. of Tokyo)*
"Ab initio molecular dynamics simulation of the electrode solution interface"

11:00-11:30 Fr03 **P. Werner** *(Univ. of Fribourg)*
"Doublon diffusion in Mott insulators"

11:30-12:00 Fr04 **R. Arita** *(Univ. of Tokyo)*
"First-principles study of the Mott transition and superconductivity in A_3C_{60}"

12:00-14:30 Lunch Break & Poster Session

14:30-16:00 Session: 5-1 *Chair: R. Arita*

14:30-15:00 Fr05 **T. K. Lee** *(Academia Sinica)*
"Mott physics revealed in high temperature superconductors by resonant inelastic x-ray scattering experiments"

15:00-15:30 Fr06 **T. Mizushima** *(Okayama Univ.)*
"Symmetry Protected Topological Superfluids and Superconductors"

15:30-16:00 Fr07 **T. Claeson** *(Chalmers Univ. of Tech.)*
"The interface of $LaAlO_3/SrTiO_3$: Experimental clues"

16:00-16:30 Break

16:30-17:30 Session: 5-2 *Chair: R. Arita*

16:30-17:00 Fr08 **S. Yip** *(Academia Sinica)*
"High spin Fermi liquid"

17:00-17:30 Fr09 **M. Ueda** *(Univ. of Tokyo)*
"How Maxwell's demon was exorcised: the minimum energy cost for measurement and erasure of information"

Day 3 : Saturday, January 25

09:30-10:00 Registration

10:00-11:30 Session: 6 *Chair: S. Maekawa*

10:00-10:30 Sa01 **A. Fert** *(Univ. Paris-Sud)*
"Conversion between charge and spin currents by spin-orbit effects and examples of applications in spintronics"

10:30-11:00 Sa02 **X. Jin** *(Fudan Univ.)*
"Quantum transport in epitaxial Bi(111) thin films"

11:00-11:30 Sa03 **H. Adachi** *(ASRC, JAEA)*
"Spin Seebeck Effect and Spin Heat Conveyer"

11:30-13:00 Lunch Break

13:00-15:00 Session: 7 *Chair: Y. Bang*

13:00-13:30 Sa04 **H. Kawamura** *(Osaka Univ.)*
"Quantum spin-liquid behavior in the spin-1/2 random Heisenberg antiferromagnet on the triangular lattice"

13:30-14:00 Sa05 **N. Shannon** *(OIST)*
"Quantum spin ice"

14:00-14:30 Sa06 **M. Oshikawa** *(ISSP, Univ. of Tokyo)*
"Intrinsic Angular Momentum and Edge States of Chiral Superfluids"

14:30-15:00 Sa07 **T. Oka** *(Univ. of Tokyo)*
"Driven Dirac system and gauge/gravity duality"

15:00-15:30 Break

15:30-17:30 Session: 8 *Chair: T. K. Lee*

15:30-16:00 Sa08 **M. Kawasaki** *(Univ. of Tokyo)*
"Even Denominator Fractional Quantum Hall Physics in ZnO"

16:00-16:30 Sa09 **C. Kim** *(Yonsei Univ.)*
"Photoemission study of the role of the orbital angular momentum in the Rashba and Dresselhaus effects"

16:30-17:00 Sa10 **X. Dai** *(Chinese Academy of Sciences)*
"Topological phases in mix valence compounds"

17:00-17:30 Sa11 **G. Kotliar** *(Rutgers Univ.)*
"Bad Metallic Transport in Model Hamiltonian Studies and in Transition Metal Oxides"