Topical Meeting

September 1st (Wed.) - 2nd (Thurs.), 2010
@Welfare and Conference Building, Wako Campus, RIKEN

Sept. 1st (Wed.), 2010

8 : 30-11:30 First-principles calculations for superconductors

	Opening(15min)
L. Boeri	"Electron-Phonon Interaction in Fe-based Superconductors"
M. Capone	"Strongly Correlated Superconductivity in Cs_3C_{60} and other organic
X. Dai	"Gutzwiller Density Functional Studies of FeAs-Based Superconductors: Structure Optimization and Evidence for a Three-Dimensional Fermi Surface"
	break(15min)
A. Toschi	"Dichotomy between Large Local and Small Ordered Magnetic Moments in Iron-Based Superconductors"
X. Yang	"Orbital Engineering in $LaNiO_3/ABO_3$ Nickelate Heterostructures"

13:00-14:30 First-principles calculations for new materials and nano-structures

S. Savrasov	"Electronic Structure of Pyrochlore Iridates: From Topological Dirac Metal to Mott Insulator"
G.Y. Guo	"Ab initio studies of ferroelectricity and magnetism in $BiMnO_3$ and
M. S. Bahramy	"Role of electron correlation on structural phase stability, magnetism and spin-dependent transport of $CeMnNi_4$"
	break(30min)

15:00-19:30 Many-body theory combined with first-principles calculations

W. Ku	"Advanced First-Principles Calculations and Many-Body Effects in Correlated Electrons"
G. Sangiovanni	"Dynamical Vertex Approximation for Nanoscopic Systems"
J. Kunes	"Origin of metal-insulator transition in $NiS_{2-x}Se_x$"
F. Lechermann	"Correlation effects in realistic triangular lattices"
	break(30min)
E. Pavarini	"Origin of Orbital Order in $KCuF_3$ and $LaMnO_3$"
S. Okamoto	"Anomalous behavior of strongly correlated electrons with spatial
P. Werner	"Dynamical screening in correlated electron materials"
E. Gull	"Momentum-Space anisotropy and Pseudogaps: The doping-driven Metal Insulator transition in the 2d Hubbard model"

Sept. 2nd (Thurs.), 2010

8:30-12:00 Ab-initio downfolding methods

F. Aryasetiawan	"Constructing a First-Principles Scheme for Calculating the Electronic Structure of Correlated Materials"
E. Koch	"Building realistic model Hamiltonians for strongly correlated organic crystals"
	break(15min)
T. Kotani	"Re-examination of half-metallic ferromagnetism for doped $LaMnO_3$ in Quasiparticle Self-consistent GW (QSGW) method"
T. Miyake	"Ab-initio low-energy model and quasiparticle band structure based on the GW-RPA"
I. Solovyev	"Realistic Modeling of Complex Oxide Materials"
	Closing (15min)