

The 19th Japan-Korea-Taiwan Symposium on
Strongly Correlated Electron Systems (JKT19)
Jan 11-13, 2019 at Waseda University

JKT19 Program

The first day: Jan 11 (Fri)

9:15-9:30 Opening

9:30-10:30 Session 1: Topological materials I

10:30-11:00 Break

11:00-12:30 Session 2: Topological materials II

12:30-14:00 Lunch

14:00-15:30 Session 3: Novel materials and photoemission

15:30-16:00 Break

16:00-18:00 Session 4: Photoemission and other spectroscopies

18:00-20:00 Dinner (*only for the invited speakers and those from foreign countries in the nearby restaurant*)

The second day: Jan 12 (Sat)

9:00-10:30 Session 5: Multiferroics and domain structures

10:30-11:00 Break and Group photo (10:30-11:00)

11:00-12:00 Session 6: Spin and magnetism

12:00-13:30 Lunch

13:30-15:00 Session 7: Thin films

15:00-16:00 Session 8: Poster preview (*1 minute talk by each presenter*)

16:00-17:45 Session 9: Poster session

18:00-20:00 Banquet (*for all the participants in a buffet style in the campus restaurant*)

The third day: Jan 13 (Sun)

9:00-10:00 Session 10: Novel Correlated Materials I

10:00-10:30 Break

10:30-12:00 Session 11: Novel Correlated Materials II

12:00-12:10 Closing

12:10-13:30 Lunch

13:30-16:00 Lab Tour (participation is voluntary)

The first day: Jan 11 (Fri)

Conference room, Bldg 55N, Nishiwaseda Campus, Waseda University

8:30-9:15 Registration

9:15-9:30 Opening

Session 1 Topological materials I (chair: Takao Sasagawa)

9:30 -10:00 Satoru Nakatsuji (ISSP) “Novel Spintronic Functions in Topological Frustrated Magnets Mn_3X ”

10:00-10:30 Joung Real Ahn (Sungkyunkwan Univ.) “Dirac electrons in a dodecagonal graphene quasicrystal”

Break (10:30-11:00)

Session 2 Topological materials II (chair: Satoru Nakatsuji)

11:00-11:30 Takao Sasagawa (Tokyo Inst. of Technol.) “Catalogue of Single Crystals having Exotic Electronic States”

11:30-12:00 Bohm-Jung Yang (Seoul National Univ.) “Two dimensional Peierls instability induced by dispersionless Dirac line nodes in layered perovskite oxides”

12:00-12:30 Eun-Gook Moon (KAIST) “Exotic phase transitions beyond Landau paradigm”

Lunch (12:30-14:00)

Session 3 Novel materials and photoemission (chair: Je-Geun Park)

14:00-14:30 Ping-Hui Lin (NSRRC) “Compact Tr-ARPES system using HHG EUV laser source in NSRRC”

14:30-15:00 Daniel. I. Khomskii (Univ. Köln) ““Molecules” in solids against magnetism”

15:00-15:30 Takashi Mizokawa (Waseda Univ.) “Photoemission spectromicroscopy on transition-metal compounds with charge-orbital instability”

Break (15:30-16:00)

Session 4 Photoemission and other spectroscopies (chair: Tsuyoshi Kimura)

16:00-16:30 Atsushi Fujimori (Univ. Tokyo) “Electronic Structure of 2D Ferromagnets”

16:30-17:00 Shik Shin (ISSP) “Orbital density wave (ODW) and its dynamics in Fe superconductors”

17:00-17:30 Di-Jing Huang (NSRRC) “Electronic Excitations in Cuprate $La_{2-x}Sr_xCuO_4$ Revealed by RIXS”

19:00-21:00 Dinner (*only for the participants from Korea and Taiwan and the invited speakers at “Aen” in Isetan Kaikan*)

The second day: Jan 12 (Sat)

Conference room, Bldg 55N, Nishiwaseda Campus, Waseda University

Session 5 Multiferroics and domain structures (chair: Di-Jing Huang)

9:00-9:30 Way-Faung Pong (Tamkang University) “Interplay of Spin, rOrbital and Lattice Correlations in an xy-like Spin-Glass (Ni_{0.4}Mn_{0.6})TiO₃ Single Crystal: Neutron and X-ray Studies”

9:30-10:00 Tsuyoshi Kimura (Univ. Tokyo) “Observation of different types of antiferromagnetic domains by resonant x-ray microdiffraction”

10:00-10:30 Ming-Wen Chu (National Taiwan University) “Atomic-Scale Unraveling of Transition Pathway, Hidden Order Parameter, and Domain Topology in Improper Ferroelectrics”

Break and Group photo (10:30-11:00)

Session 6 Spin and magnetism (chair: Takashi Mizokawa)

11:00-11:30 Bumjoon Kim (POSTECH) “High-velocity spin waves in the Sr₂IrO₄/Sr₃Ir₂O₇ heterostructure”

11:30-12:00 Masahito Mochizuki (Waseda Univ.) “Dynamical Phenomena and Device Functions of Magnetic Skyrmions”

Lunch (12:00-13:30)

Session 7 Thin films (chair: Jaejun Yu)

13:30-14:00 Ying Hao Chu (National Chiao Tung Univ.) “The Transport Behaviors of Dimensionality Controlled SrRuO₃ Films with Various Boundary Conditions”

14:00-14:30 Jan-Chi Yang (National Cheng Kung Univ.) “Deterministic optical control of room temperature multiferroicity in BiFeO₃ thin films”

14:30-15:00 Jobu Matsuno (Osaka Univ.) “Oxide spintronics utilizing spin-orbit coupling”

Session 8: Poster preview (*1 minute talk by each presenter*)

15:00-16:00

Session 9 : Poster session at Bldg. 63, room 03 & 04 (2nd floor)

16:00-17:45

18:00-20:00 Banquet (*for all the participants in a buffet style*)
Restaurant at Bldg. 63 (1st floor)

The third day: Jan 13 (Sun)

Conference room, Bldg 55N, Nishiwaseda Campus, Waseda University

Session 10 Novel Correlated Materials I (chair: Takuro Katsufuji)

9:00-9:30 Sang Wook Cheong (Rutgers Univ.) “Topological Vortex Domains vs. Pseudo-Vortex domains”

9:30-10:00 Hidenori Takagi (Max Planck Inst.) “Excitonic Transition in the layered chalcogenide Ta_2NiSe_5 ”

Break (10:00-10:30)

Session 11 Novel Correlated Materials II (chair Hidenori Takagi)

10:30-11:00 Je-Geun Park (Seoul National Univ.) “Spin-orbit entanglement in CuAl_2O_4 and Li_2RuO_3 ”

11:00-11:30 Jaejun Yu (Seoul National Univ.) “Spin-state change, magnetic ordering, and ferroelectricity driven by oxygen vacancy in $\text{SrCoO}_{3-\delta}$ ”

11:30-12:00 Takuro Katsufuji (Waseda Univ.) “Anomalous metal-insulator transition in V, Nb, and Ta oxides”

12:00-12:10 Closing

Lunch (12:10-13:30)

13:30-16:00 Lab Tour (participation is voluntary)