LEES 2016

International Conference on

Low-Energy Electrodynamics in Solids

PROGRAM

May 29 - June 3, 2016

Hotel LAFORET Biwako, Moriyama, Shiga, JAPAN

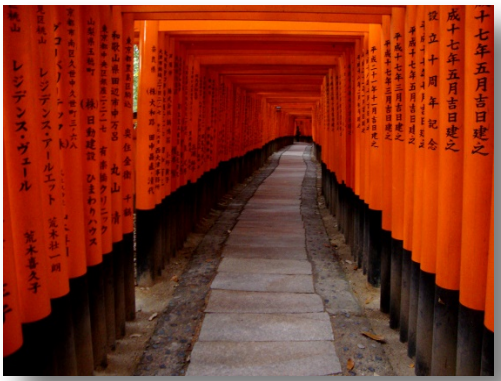
Outline of LEES 2016

SCOPE

LEES 2016 will be a forum for the interdisciplinary discussion of the low-energy electrodynamics in solids, at both the theoretical and experimental methods of optical/photoemission spectroscopy, inelastic neutron/X-ray scattering, scanning tunneling microscopy/spectroscopy and so on, with specific emphasis on the electronic and magnetic properties of quantum materials. This conference will be the 12th LEES meeting and follows the highly successful workshops at Bad Honnef (1993), Trest (1995), Ascona (1997), Pecs (1999), Montauk (2002), Kloster Banz (2004), Tallinn (2006), Vancouver-Whistler (2008), Les Diablerets (2010), Napa Valley (2012), and Loire Valley (2014).

TOPICS

Cuprate & Iron-based superconductors
Graphene & Dirac materials
Weyl semimetals
Topological effects
Non-Fermi & Fermi liquids in metals
Multiferroics & Ferroelectrics
2D electronic systems
Heavy Fermions
Novel superconductors
Other strongly correlated systems
Novel physical peroperties and new materials
New methods and techniques



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Access to the conference site

From Kansai International Airport (KIX)

Take the JR Airport Express *Haruka* (2,850 yen, 75 min) or the Airport Limousine bus (2,550 yen, 85 min) to**Kyoto** and change to the JR Kosei Line to **Katata** (410 yen, 25 min). Take a shuttle bus or a taxi from Katata station to Hotel Laforet Biwako.

From Narita International Airport (NRT)

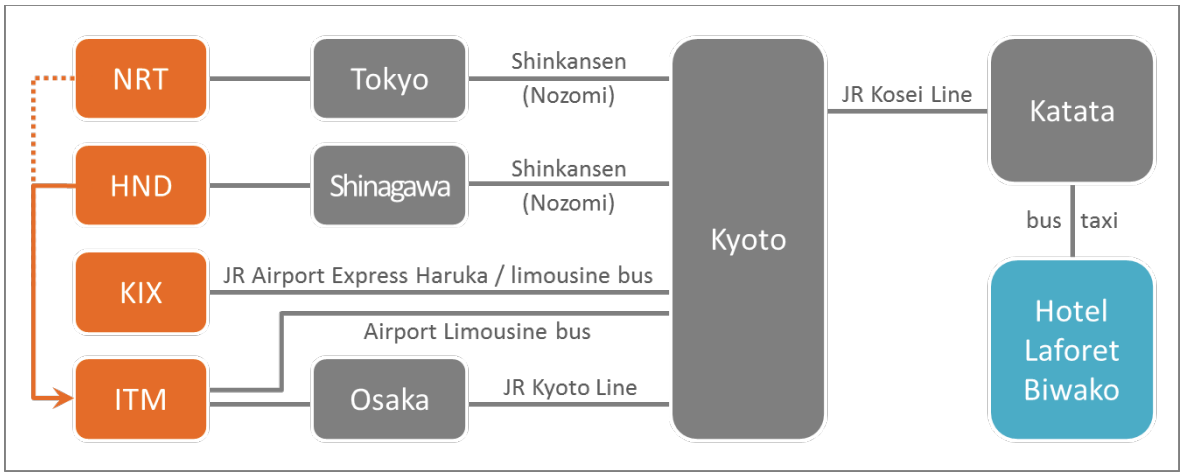
Take a train to **Tokyo** (2,630 yen by Slyliner or 3,020 yen by Narita Express, 55 min). Take the *Nozomi*Shinkansen to **Kyoto** (13,080 yen, 140 min). Change to the JR Kosei Line to **Katata** (410 yen, 25 min). Take a shuttle bus or a taxi from Katata station to Hotel Laforet Biwako. From NRT, a few connecting flights to Osaka International Airport (ITM) are also available.

From Haneda International Airport (HND)

Take a Keikyu train to **Shinagawa** (20 min by rapid). From Shinagawa take the *Nozomi* Shinkansen to **Kyoto**(13,080 yen, 130 min). Change to the JR Kosei Line to **Katata** (410 yen, 25 min). Take a shuttle bus or a taxi from Katata station to Hotel Laforet Biwako. From HND, many connecting flights to Osaka International Airport (ITM) are also available.

From Osaka International Airport (ITM)

(Route 1) Take the Osaka Monorail to **Hotarugaike** (200 yen, 2 min). At **Hotarugaike**, transfer to the Hankyu Takarazuka Line and go to **Umeda** (220 yen, 15 min). Walk to JR **Osaka** station (10 min). Take the JR Kyoto Line to **Kyoto** and change trains to the Kosei Line to **Katata** (1,140 yen, 60 min). Take a shuttle bus or a taxi from Katata station to Hotel Laforet Biwako.
(Route 2) Take the Airport Limousine bus to JR **Kyoto** station (1,310 yen, 50 min). Take the Kosei Line to**Katata** (410 yen, 25 min). Take a shuttle bus (free of charge), a public bus (250 yen) or a taxi (~2450 yen) from Katata station to Hotel Laforet Biwako.



Timetable from KIX to the conference site using Haruka and JR Kosei line.

KIX -> Kyoto station (JR Limited Express Haruka)	Kyoto station -> Katata station (JR Kosei line)	Katata station -> Hotel Laforet Biwako (Public bus [P, 250 yen], Shuttle bus [S, free of charge])
11:14 ---> 12:34	12:45 --->13:04	13:45 (P)
11:44 ---> 13:04	13:11 ---> 13:35	13:45 (P)
12:14 ---> 13:34	13:45 ---> 14:04	14:35 (S)
12:44 ---> 14:04	14:11 ---> 14:35	14:45 (P)
13:14 ---> 14:34	14:45 ---> 15:04	15:15 (P)
13:44 ---> 15:04	15:11 ---> 15:35	15:45 (P)
14:14 ---> 15:34	15:45 ---> 16:04	16:15 (S)
14:44 ---> 16:04	16:09 ---> 16:35	17:00 (P)
15:14 ---> 16:34	16:42 ---> 17:07	17:45 (S)
15:44 ---> 17:04	17:10 ---> 17:35	17:45 (S)
16:14 ---> 17:34	17:41 ---> 18:07	18:30 (P)
16:44 ---> 18:04	18:10 ---> 18:35	18:45 (S)
17:14 ---> 18:34	18:41 --->19:07	19:28 (P)
17:44 ---> 19:04	19:16 --->19:42	19:45 (S)
18:16 ---> 19:34	19:41 ---> 20:06	20:15 (S)
18:46 ---> 20:04	20:12 ---> 20:37	20:42 (P)
19:16 ---> 20:34	20:40 --->21:05	21:24 (P)
19:46 ---> 21:03	21:10 ---> 21:40	22:32 (P)
20:16 ---> 21:34	21:40 ---> 22:05	22:32 (P)
20:46 ---> 22:03	22:26 ---> 22:51	taxi only. (~ 3000 yen)
21:25 ---> 22:42	22:52 ---> 23:17	taxi only. (~ 3000 yen)
22:16 ---> 23:32	00:05 ---> 00:31	taxi only. (~ 3000 yen)

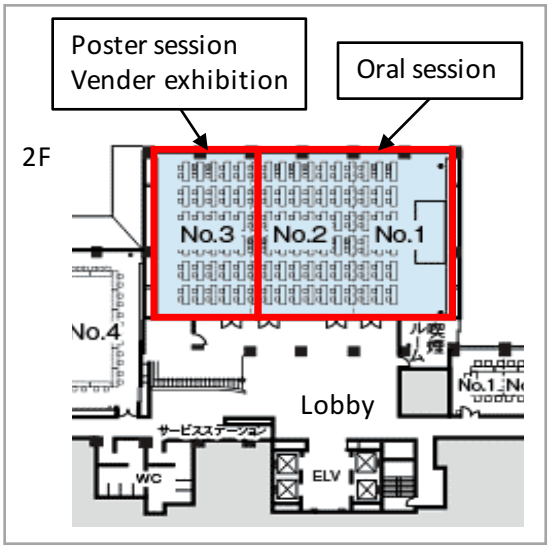
Time table of public/shuttle bus from Katata station

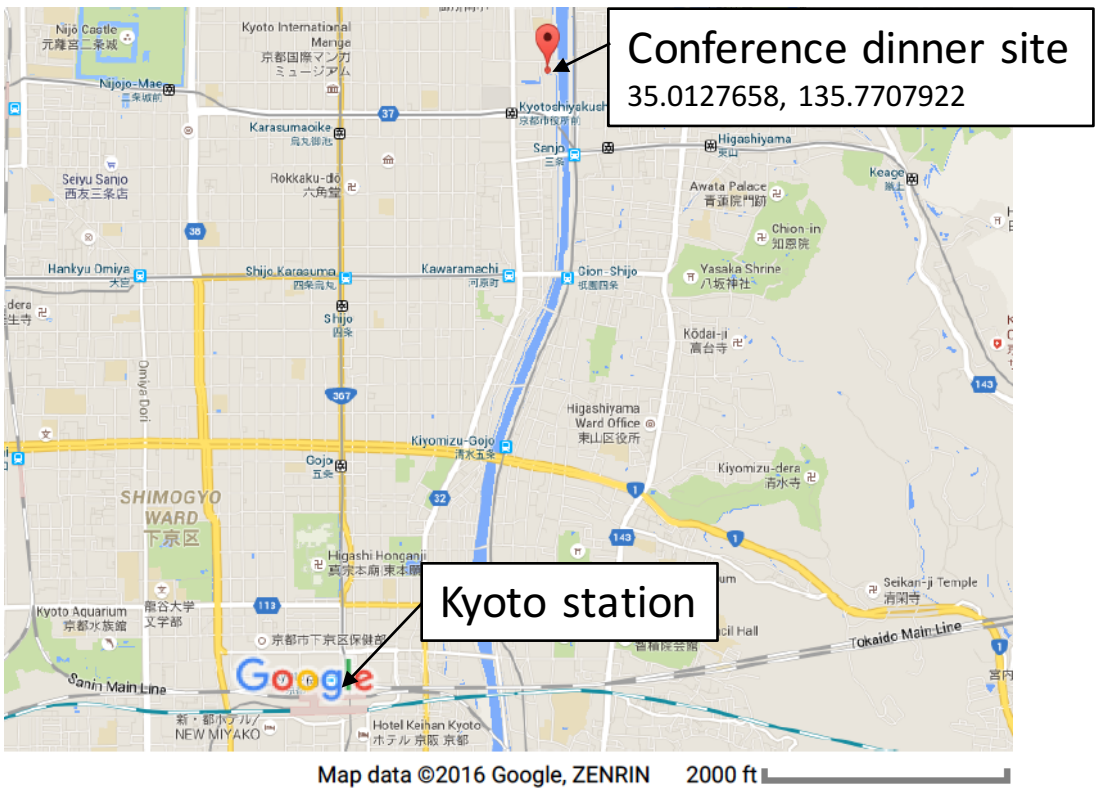
Public bus (P, 250 yen) and shuttle bus (S, free of charge) from Katata station.
(Required riding time: 10-20 min.)

May 29 (Sunday)					Week days (No shuttle bus)			
Hour	Minute				Hour	Minute		
8		28 (P)			8			48 (P)
9	10 (P)	20 (S)	40 (P)		9	14 (P)		42 (P)
10	11 (P)	35 (S)			10	11 (P)		
11	15 (P)	35 (S)	45 (P)		11	15 (P)		
12					12			
13	00 (P)		45 (P)		13	10 (P)		
14		35 (S)	45 (P)		14	00 (P)		44 (P)
15	15 (P)	35 (S)	45 (P)		15		26 (P)	
16	15 (S)	35 (P)			16	10 (P)		55 (P)
17	00 (P)		45 (S)		17			
18	00 (P)	30 (P)	45 (S) 59 (P)		18	15 (P)		59 (P)
19		28 (P)	45 (S)		19			
20	15 (S)		42 (P)		20		27 (P)	
21		24 (P)			21		24 (P)	
22		32 (P)			22		32 (P)	

Information

- Conference site
  - Large conference room on the 2nd floor (2F).
- Meal
  - All meals are provided at Dinning Espoir on the 1st floor (1F).
- Internet
  - Wifi will be available in the conference room, lobbies on 1F and 2F and rooms on 6F.
- Welcome reception on May 29th
  - Start at 19:00.
  - Banquet room on the basement floor (BF).
- Excursion on June 1st
  - Start at 14:00 from the entrance of Hotel Laforet.
  - Schedule: Visit to Sakamoto (www.biwako-visitors.jp/spot/detail/803 [in Japanese])
    → Mt. Hiei-zan Enryaku-ji temple (kyoto.travel/en/shrine_temple/126)
    → Conference dinner restaurant in Kyoto (see the map).
- Conference dinner on June 1st
  - Place: Ganko Takasegawa Nijoen (http://www.gankofood.co.jp/en/)
  - Phone: +81-75-223-3456
  - Time: 18:30–
  - All participants can take buses to come back to Hotel Laforet Biwako after the dinner.





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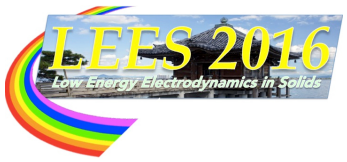

Program

May 29 (Sun.)	May 30 (Mon.)	May 31 (Tue.)	June 1 (Wed.)	June 2 (Thu.)	June 3 (Fri.)
	8:45 **Opening**		8:45 **Genzel Prize Ceremony**		
	9:00-10:30 Cuprates (I) (Tajima) **I-1: Sacuto** **I-2: Greven** **I-3: Kondo** C-1: Ideta	9:00-10:30 Iron S.C. (I) (Hanaguri) **I-10: Feng** **I-11: Borisenko** **I-12: Chubukov** C-9: Degiorgi	9:00-10:25 Topology (II) (Dressel) **I-19: Armitage** **I-21: Murakami** C-17: Akrap C'-18: Sohn	9:00-10:25 Novel materials (Pimenov) **I-25: Rusydi** **I-26: Perucchi** C'-21: Maeda C-22: Skiadopoulou	9:00-10:30 Cuprate (III) (Sacuto) **I-34: Van der Marel** **I-35: Toda** **I-36: Seibold** C-29: Badoux
	11:00-12:25 Time-resolved (I) (Chubukov) **I-4: Hu** **I-5: Oka** C'-2: Tohyama C-3: Morimoto	11:00-12:30 4f & 5d systems (Kimura) **I-13: Schemm** **I-14: Scheffler** **I-15: Kim** C-10: Zonno	11:00-12:25 Cuprates (II) (Greven) **I-22: Le Tacon** **I-24: Julien** C'-19: Ishii C-20: Sakai	11:00-12:25 Time-resolved (II) (Tohyama) **I-27: Shimano** **I-28: Devereaux** C'-23: Cantaluppi C-24: Crepaldi	11:00-12:30 Topology (III) (Armitage) **I-37: Chen** **I-38: Dai** **I-39: Pronin** C-30: Kohsaka
	12:30-14:00 Lunch & Discussion	12:30-14:00 Lunch & Discussion	12:30-14:00 Lunch	12:30-14:00 Lunch & Discussion	12:30 **Closing** -14:00 Lunch
	14:00-15:50 Topology (I) (Kim) **I-6: Tokura** **I-7: Orlita** **I-8: Moore** C'-4: Lupi C-5: Lee	14:00-15:45 Multiferroic (Tokura) **I-16: Kezsmarki** **I-17: Pimenov** C'-11: Kamba C'-12: Room C-13(P-22): Wang	**Excursion 14:00-** *Sakamoto, Mt. Hiei & Enryakuji temple*	14:00-15:50 Iron S.C.(II) (Borisenko) **I-29: Hanaguri** **I-30: Coldea** **I-31: Gastiasoro** C'-25: Blumberg C-26: Miyasaka	
	16:10-17:20 Space-resolved (Okamura) **I-9: Kuzel** C-6: Boehmler C-7: Martin C-8: Hattori	16:10-17:20 Novel optics (I) (Rusydi) **I-18: Shin** C-14: Bachar C-15: Boris C-16: Ito		16:10-17:30 Novel optics (II) (van der Marel) **I-32: Dressel** **I-33: Gorshunov** C-27: Burch C-28: Chia	
17:00-19:00 Registration	17:20-18:00 Poster Preview (Maeda)	17:20-18:00 Poster Preview (Fujita)		17:30-18:10 Poster Preview (Ishii)	
19:00-21:00 **Welcome party**	18:00-19:30 Dinner	18:00-19:30 Dinner	**Banquet 18:30-** *Japanese Restaurant in Kyoto*	18:10-19:30 Dinner	
	19:30-21:00 Poster	19:30-21:00 Poster		19:30-21:00 Poster	

I-**: invited talk (25 min.)
C'-**: contributed talk (20 min.)
C-**:contributed talk (15 min.)
incl. discussion

May 30 (Mon.)

Cuprate I

Chair: S. Tajima (Osaka Univ.)

I-1 (9:00 ~ 9:25)
Pseudogap and its Interplay with the Superconducting Gap in Cuprates Superconductors
A. Sacuto (Université Paris Diderot, France)

I-2 (9:25 ~ 9:50)
New insight into the strange-metal and pseudogap behavior of the cuprates
M. Greven (University of Minnesota, USA)

I-3 (9:50 ~ 10:15)
Point nodes persisting far beyond T_c in Bi2212
T. Kondo (ISSP, University of Tokyo, Japan)

C-1 (10:15 ~ 10:30)
Observation of triple-layer splitting in high-T_c cuprate $Bi_2Sr_2Ca_2Cu_3O_{10+\delta}$ observed by ARPES
S. Ideta (UVSOR, Institute for Molecular Science, Japan)

Time-resolved I

Chair: A. V. Chubukov (Univ. of Minnesota)

I-4 (11:00 ~ 11:25)
Light control of correlated electron systems
W. Z. Hu (Max Planck Institute for the Structure and Dynamics of Matter, Germany)

I-5 (11:25 ~ 11:50)
Control of Topology in Quantum Materials by Laser
T. Oka (Max Planck Institute for Chemical Physics of Solids, Germany)

C′-2 (11:50 ~ 12:10)
Nonequilibrium Charge Dynamics in Strongly Correlated Electron Systems
T. Tohyama (Department of Applied Physics, Tokyo University of Science, Japan)

C-3 (12:10 ~ 12:25)
Topological aspects of nonlinear optical responses
T. Morimoto (Department of Physics, University of California, Berkeley, USA)

Topology I

Chair: C. Kim (Seoul Nat'l Univ.)

I-6 (14:00 ~ 14:25)
Magnetoelectric responses from topological magnets
Y. Tokura (RIKEN Center for Emergent Matter Science, Japan)

I-7 (14:25 ~ 14:50)
Magneto-optics of massless and massive electrons
M. Orlita (Laboratoire National des Champs Magnétiques Intenses – Grenoble, France)

I-8 (14:50 ~ 15:15)
Electromagnetic response of semimetals from wavefunction geometry and topology
J. E. Moore (University of California, Berkeley, USA)

C'-4 (15:15 ~ 15:35)
Non Linear Terahertz Behavior of Bi_2Se_3 Topological Insulator
S. Lupi (INFN and Department of Physics, Sapienza University of Rome, Italy)

C-5 (15:35 ~ 15:50)
Direct measurement of proximity-induced magnetism at the buried interface between a topological insulator and a ferromagnet
C. Lee (Department of Physics, Massachusetts Institute of Technology, USA)

Space-resolved

Chair: H. Okamura (Tokushima Univ.)

I-9 (16:10 ~ 16:35)
Terahertz photoconductivity in semiconductor nanostructures: Effective medium theory aspects
P. Kužel (Institute of Physics, Academy of Sciences of the Czech Republic, Czech Republic)

C-6 (16:35 ~ 16:50)
nano-FTIR: Imaging & Spectroscopy with 10 nm Spatial Resolution
M. Boehmler (neaspec GmbH, Germany)

C-7 (16:50 ~ 17:05)
Nanospectral Imaging of Phonon Polaritons and Single Plasmonic Nanocrystals with Synchrotron Infrared Nano Spectroscopy (SINS)
M. C. Martin (ALS, Lawrence Berkeley National Laboratory, USA)

C-8 (17:05 ~ 17:20)
Investigation of nanodomain properties in the phase-separated manganite by probing electron dynamics
A. N. Hattori (ISIR, Osaka University, Japan)

May 31 (Tue.)

Iron-based superconductors I

Chair: T. Hanaguri (RIKEN)

I-10 (9:00 ~ 9:25)
Exploration of superconductivity in FeSe films and electron doped Sr_2IrO_4
D. L. Feng (State Key Laboratory of Surface Physics, Department of Physics, Fudan University, China)

I-11 (9:25 ~ 9:50)
Spin-Orbit Coupling and Nematicity in Iron-Based Superconductors
S. Borisenko (IFW Dresden, Germany)

I-12 (9:50 ~ 10:15)
Magnetism, superconductivity, and spontaneous orbital order in iron-based superconductors: who comes first and why?
A. V. Chubukov (School of Physics and Astronomy, University of Minnesota, USA)

C-9 (10:15 ~ 10:30)
Origin of the resistive anisotropy in the electronic nematic phase of $BaFe_2As_2$ revealed by optical spectroscopy
L. Degiorgi (Laboratorium für Festkörperphysik, ETH - Zürich, Switzerland)

4f & 5d systems

Chair: S. Kimura (Osaka Univ.)

I-13 (11:00 ~ 11:25)
Polar Kerr effect studies of heavy fermion superconductors
E. Schemm (Stanford Institute for Materials and Energy Sciences (SIMES), SLAC National Accelerator Laboratory, USA)

I-14 (11:25 ~ 11:50)
Non-Fermi-Liquid Behavior in the THz Response of $CeCoIn_5$
M. Scheffler (1. Physikalisches Institut, Universität Stuttgart, Germany)

I-15 (11:50 ~ 12:15)
Electric field control of octahedra rotation on the surface of Sr_2RuO_4 C. Kim (Center for Correlated Electron Systems, Institute for Basic Science and Department of Physics and Astronomy, Seoul National University, Korea)

C-10 (12:15 ~ 12:30)
The Spectral Function of Honeycomb Na_2IrO_3 by ARPES upon Li Substitution
M. Zonno (Department of Physics and Astronomy, UBC, Canada)

Multiferroic

Chair: Y. Tokura (RIKEN)

I-16 (14:00 ~ 14:25)
Magnetoelectric memory with optical readout
I. Kezsmarki (Budapest University of Technology and Economics, Hungary)

I-17 (14:25 ~ 14:50)
Directional anisotropy of light in multiferroics
A. Pimenov (Institute of Solid State Physics, Vienna University of Technology, Austria)

C'-11 (14:50 ~ 15:10)
Review of ferroelectric and magnetic soft modes in multiferroics
S. Kamba (Institute of Physic, Czech Academy of Sciences, Czech Republic)

C'-12 (15:10 ~ 15:30)
Optical Diode Effect at Spin-Wave Excitations of the Room-Temperature Multiferroic $BiFeO_3$
T. Rõõm (National Institute of Chemical Physics and Biophysics, Estonia)

C-13 (15:30 ~ 15:45)
From confined spinons to emergent fermions: Evolution of elementary excitations in a transverse-field Ising chain
Z. Wang (Experimental Physics V, Center for Electronic Correlations and Magnetism, Institute of Physics, University of Augsburg, Germany)

Novel optics I

Chair: A. Rusydi (NUS)

I-18 (16:10 ~ 16:35)
Ultrahigh spatial resolution magnetic imaging of oxide surfaces and interfaces by the development of laser-PEEM
S. Shin (The Institute for Solid State Physics, The University of Tokyo, Japan)

C-14 (16:35 ~ 16:50)
Competition between enhanced Cooper pairing and suppressed phase coherence in coupled aluminum nanograins
N. Bachar (Laboratory for Superconductivity and Optical Spectroscopy, Ariel University, Israel)

C-15 (16:50 ~ 17:05)
Giant Exciton Fano Resonance in Ta_2NiSe_5
A. V. Boris (Max Planck Institute for Solid State Research, Germany)

C-16 (17:05 ~ 17:20)
Electronic structure of a quasi-one dimensional thermoelectric material $Ba_3Co_2O_6(CO_3)_{0.7}$ studied by angle-resolved photoemission spectroscopy
T. Ito (Graduate School of Engineering, Nagoya University, Japan)

June 1 (Wed.)

Topology II

Chair: M. Dressel (Univ. of Stuttgart)

I-19 (9:00 ~ 9:25)
Low energy electrodynamics of topological insulators
N. P. Armitage (The Institute for Quantum Matter, Department of Physics and Astronomy, The Johns Hopkins University, USA)

I-21 (9:25 ~ 9:50)
Topological phase transitions and surface states in topological semimetals
S. Murakami (Tokyo Institute of Technology, Japan)

C-17 (9:50 ~ 10:05)
Kane electrons evidenced by magneto-optics of Cd_3As_2 in the quantum limit
A. Akrap (DPMC, University of Geneva, Switzerland)

C'-18 (10:05 ~ 10:25)
Optical Spectroscopic Studies on the Lifshitz-Type Metal-Insulator Transition in $Cd_2Os_2O_7$
C. H. Sohn (Center for Correlated Electron Systems, Institute for Basic Science and Department of Physics and Astronomy, Seoul National University, Korea)

Cuprates II

Chair: M. Greven (Univ. of Minnesota)

I-22 (11:00 ~ 11:25)
Magnetic Excitations in doped Cuprates and Iridates from Raman Scattering and RIXS
M. Le Tacon (Institut für Festkörperphysik, Karlsruher Institut für Technologie, Germany)

I-24 (11:25 ~ 11:50)
NMR studies of charge order in $YBa_2Cu_3O_y$
Marc-Henri Julien (Laboratoire National des Champs Magnétiques Intenses (LNCMI), Grenoble, France)

C'-19 (11:50 ~ 12:10)
Momentum-resolved charge fluctuations proximate to the charge-order phase measured by resonant inelastic x-ray scattering
K. Ishii (SPring-8, Japan Atomic Energy Agency, Japan)

C-20 (12:10 ~ 12:25)
Hidden fermionic excitation as the origin of pseudogap and high-temperature superconductivity in cuprates
S. Sakai (Center for Emergent Matter Science, RIKEN, Japan)

June 2 (Thu.)

Novel materials

Chair: A. Pimenov (TU Wien)

I-25 (9:00 ~ 9:25)
High-energy optical conductivity and anomalous spectral weight transfers in strongly correlated electron systems
A. Rusydi (National University of Singapore, Singapore)

I-26 (9:25 ~ 9:50)
Optical properties of nickelate thin films and heterostructures
A. Perucchi (INSTM UdR Trieste-ST and Elettra - Sincrotrone Trieste S.C.p.A., Italy)

C'-21 (9:50 ~ 10:10)
Superconductivity fluctuation of $FeSe_{1-x}Te_x$ measured by microwave broadband technique
A. Maeda (Department of Basic Sciences, University of Tokyo, Japan)

C-22 (10:10 ~ 10:25)
Magnetoelectric spin excitations in multiferroic Ni_3TeO_6
S. Skiadopoulou (Institute of Physics, Academy of Sciences of the Czech Republic, Czech Republic)

Time-resolved II

Chair: T. Tohyama (Tokyo Univ. of Science)

I-27 (11:00 ~ 11:25)
Nonlinear THz spectroscopy of collective modes in superconductors
R. Shimano (Cryogenic Research Center, The University of Tokyo, Japan)

I-28 (11:25 ~ 11:50)
On the theory for pump-probe spectroscopy in quantum materials
T. P. Devereaux (Stanford University, USA)

C'-23 (11:50 ~ 12:10)
Possible light-induced superconductivity in metallic K_3C_{60}
A. Cantaluppi (Max Planck Institute for the Structure and Dynamics of Matter, Germany)

C-24 (12:10 ~ 12:25)
Ultrafast Optical Control of the Topologically Protected Electronic Properties of $ZrTe_5$
A. Crepaldi (Elettra-Sincrotrone Trieste S. C. p. A., Italy)

Iron-based superconductors II

Chair: S. Borisenko (IFW Dresden)

I-29 (14:00 ~ 14:25)
Spectroscopic-imaging STM studies of the iron chalcogenide superconductor FeSe
T. Hanaguri (RIKEN Center for Emergent Matter Science, Japan)

I-30 (14:25 ~ 14:50)
Fermi surface evolution across the nematic phase in bulk $Fe(Se_{1-x}S_x)$ using ARPES and quantum oscillations
A. Coldea (Clarendon Laboratory, Oxford University, UK)

I-31 (14:50 ~ 15:15)
Emergent defect states as a source of resistivity anisotropy in iron pnictides
M. N. Gastiasoro (Niels Bohr Institute, University of Copenhagen, Denmark)

C'-25 (15:15 ~ 15:35)
Helicity preserving photoluminescence from the topological insulator Bi_2Se_3
G. Blumberg (Rutgers University, Department of Physics and Astronomy, USA)

C-26 (15:35 ~ 15:50)
Anomalous low-energy excitation induced by magnetic impurity in optical spectrum of iron-based superconductor
S. Miyasaka (Department of Physics, Osaka University, Japan)

Novel optics II

Chair: D. van der Marel (Univ. of Geneva)

I-32 (16:10 ~ 16:35)
Time-Resolved FTIR Studies of Phase Transitions in Low-Dimensional Organic Crystals
M. Dressel (1. Physikalisches Institut, Universität Stuttgart, Germany)

I-33 (16:35 ~ 17:00)
Incipient ferroelectricity of nanocaged water molecules
B. Gorshunov (Moscow Institute of Physics and Technology, Russia)

C-27 (17:00 ~ 17:15)
Towards Fractional Excitations with Raman and Exfoliation
K. S. Burch (Department of Physics, Boston College, USA)

C-28 (17:15 ~ 17:30)
Role of disorder, free-carrier recombination kinetics and phonon modes in the performance of $CH_3NH_3PbI_3$ perovskite films
E. E. M. Chia (Division of Physics and Applied Physics, School of Physical and Mathematical Sciences, Nanyang Technological University, Singapore)

June 3 (Fri.)

Cuprate III

Chair: A. Sacuto (Univ. Paris Diderot)

I-34 (9:00 ~ 9:25)
The correlation energy in superconductors using optics as a probe
D. van der Marel (University of Geneva, Switzerland)

I-35 (9:25 ~ 9:50)
Photoexcited quasiparticle dynamics in the pseudogap state of high-Tc superconductors
Y. Toda (Department of Applied Physics, Hokkaido University, Japan)

I-36 (9:50 ~ 10:15)
Low energy electrodynamics of strongly disordered superconductors
G. Seibold (Fachbereich Computational Physics, BTU Cottbus Senftenberg, Germany)

C-29 (10:15 ~ 10:30)
Signature of the pseudogap critical point in cuprate superconductors
S. Badoux (Département de physique & RQMP, Université de Sherbrooke, Canada)

Topology III

Chair: N. P. Armitage (Johns Hopkins Univ.)

I-37 (11:00 ~ 11:25)
Magnetoinfrared spectroscopy of Landau levels and Zeeman splitting of three-dimensional massless Dirac fermions in $ZrTe_5$
R. Y. Chen (International Center for Quantum Materials, School of Physics, Peking University, China)

I-38 (11:25 ~ 11:50)
Optical Properties of Weyl Semimetals
Y. M. Dai (Center for Integrated Nanotechnologies, Los Alamos National Laboratory, USA)

I-39 (11:50 ~ 12:15)
Optical conductivity of the 3D Dirac semimetals Cd_3As_2, $CaMnBi_2$, and $SrMnBi_2$
A. V. Pronin (1. Physikalisches Institut, Universität Stuttgart, Germany)

C-30 (12:15 ~ 12:30)
Spectroscopic imaging scanning tunneling microscopy of spin-polarized two-dimensional states on a polar semiconductor BiTeI
Y. Kohsaka (RIKEN Center for Emergent Matter Science, Japan)

May 30 (Mon.)

Poster I

Chair: A. Maeda (Univ. of Tokyo)

P-1
Electron-Hole Asymmetry in the Electron-phonon coupling in Top-gated Phosphorene Transistor
S. N. Gupta (Department of Physics, Indian Institute of Science, India)

P-2
Dimensionality-Induced Bandwidth control in $[(SrIrO_3)_m/(SrTiO_3)]$ (m=1, 2, and ∞) Superlattices
S. Y. Kim (Center for Correlated Electron Systems, Institute for Basic Science (IBS), Korea)

P-3
Negative Electronic Compressibility and Tunable Spin-Splitting in WSe_2
J. M. Riley (SUPA, University of St Andrews, UK)

P-4
Interaction-driven spin-nematicity and magnetic double-Q phases in iron pnictides
B. M. Andersen (Niels Bohr Institute, University of Copenhagen, Denmark)

P-5
The optical properties in superconducting optimally electron-doped $Ca_{8.5}La_{1.5}(Pt_3As_8)(Fe_2As_2)_5$
Y. S. Kwon (Department of Emerging Materials Science, DGIST, Korea)

P-6
Optical observations of SDW fluctuations cooperate with nematic order in Ba122 iron-based superconductors
B. Xu (Center for High Pressure Science and Technology Advanced Research, China)

P-7
Photoexcited nonequilibrium dynamics of *c*-axis Josephson plasma in $La_{2-x}Sr_xCuO_4$
K. Tomari (Department of Physics, The University of Tokyo, Japan)

P-9
Terahertz nonlinear response in an optimally-doped $YBa_2Cu_3O_7$ single crystal
Y. I. Hamada (Department of Physics, The University of Tokyo, Japan)

P-10
Theory of Inelastic X-Ray Scattering for Cuprates and Iron Arsenides
T. Tohyama (Department of Applied Physics, Tokyo University of Science, Japan)

P-11
The role of Hund's coupling in the correlations and the nematicity of iron superconductors
L. Fanfarillo (International School for Advanced Studies (SISSA/ISAS) and CNR-IOM Democritos, Italy)

P-12
Investigation of Precursor Superconducting State in YBCO through In-plane Infrared Optical Spectroscopy
K. Lee (Department of Physics, Osaka University, Japan)

P-13
Critical Charge Fluctuations in Iron Pnictide Superconductors
G. Blumberg (Rutgers University, Department of Physics and Astronomy, USA)

P-14
Chirality density wave of the "hidden order" phase in URu_2Si_2
G. Blumberg (Rutgers University, Department of Physics and Astronomy, USA)

P-15
Non-Trivial Metallic Surface State of a Kondo Semiconductor YbB_{12}
K. Hagiwara (Department of Physics, Osaka University, Japan)

P-16
Detailed optical spectroscopy of the hybridization gap and the hidden order transition in high quality URu_2Si_2 single crystals
N. Bachar (Department of Quantum Matter Physics, University of Geneva, Switzerland)

P-17
Study on electronic states of the mixed-valence compound SmS by resonance x-ray emission spectroscopy under high pressure
K. Imura (Graduate School of Science, Nagoya University, Japan)

P-18
Lattice and Magnetostrictive Contributions to the Internal Energy in Cobalt Oxide Observed by THz-TDS
M. Tatematsu (Graduate School of Science, Kobe University, Japan)

P-19
Observation of Negative Pulse Delay in Photo-Excited Silicon by THz-TDS
T. Moriyasu (Graduate School of Science, Kobe University, Japan)

P-20
Microwave Spectroscopy at mK Temperatures Using Planar Devices
M. Scheffler (1. Physikalisches Institut, Universität Stuttgart, Germany)

May 31 (Tue.)

Poster II

Chair: M. Fujita (Tohoku Univ.)

P-21
Strain effect on the visible emission in ferroelectric nanotubes: template and wall-thickness effect
Y. S. Lee (Department of Physics, Soongsil University, Korea)

P-22 (same as C-13)
From confined spinons to emergent fermions: Evolution of elementary excitations in a transverse-field Ising chain
Z. Wang (Experimental Physics V, Center for Electronic Correlations and Magnetism, Institute of Physics, University of Augsburg, Germany)

P-23
Electric-Field Induced Magnetization in Antiferromagnetic Chromium Oxide
T. Shinkai (Graduate School of Science, Kobe University, Japan)

P-24
Non-reciprocal directional dichroism in the canted AFM phase of $BiFeO_3$ at THz frequencies
U. Nagel (National Institute of Chemical Physics and Biophysics, Estonia)

P-25
Ultrafast Lattice Dynamics in Multiferroic Cupric Oxide
T. Kohmoto (Graduate School of Science, Kobe University, Japan)

P-26
Photo-induced phase transition of SmS
Y. Takeno (Department of Physics, Osaka University, Japan)

P-27
Universalities of dielectric response in biological materials
B. P. Gorshunov (Moscow Institute of Physics and Technology, Russia)

P-28
Anomalous quasi-two dimensional electronic state in $Co_3Sn_{2-x}In_xS_2$ shandites
M. A. Kassem (Department of Materials Science and Engineering, Kyoto University, Japan)

P-29
Low energy electronic structure of the semimetal $LaSb_2$
M. Michiardi (Department of Physics and Astronomy, Aarhus University, Denmark)

P-33
Optical probe of spin correlations in the Kitaev magnet $RuCl_3$
L. Sandilands (IBS CCES & Dept. of Physics, Seoul National University, Korea)

P-34
THz magneto-optic study of $Ni(Cl_{1-x}Br_x)_2 \cdot 4SC(NH_2)_2$ with x=0 and x=0.13
D. Hüvonen (National Institute of Chemical Physics and Biophysics, Estonia)

P-35
Studies of the Mott Insulator-Metal transition on $BaCo_{1-x}Ni_xS_2$ by optical conductivity
D. Santos-Cottin (Université Pierre et Marie Curie, Institut de Minéralogie de Physique des Matériaux et de Cosmologie, France)

P-36
Low-energy electrodynamic of quantum spin liquid candidate $YbMgGaO_4$
T. Dong (International Center for Quantum Materials, School of Physics, Peking University, China)

P-37
Superconducting States of Topological Surface States in β-$PdBi_2$ investigated by STM/STS
K. Iwaya (RIKEN-CEMS, Japan)

P-38
Terahertz properties of Dirac charge carriers in HgTe films
V. Dziom (Institute of Solid State Physics, Vienna University of Technology, Austria)

P-39
Probing of the dispersion of the phonon that couples with the Dirac electrons in graphene: an ARPES study
S. Tanaka (Institute of Scientific and Industrial Research, Osaka University, Japan)

P-40
Pressure-dependent optical studies of α-$(BEDT\text{-}TTF)_2I_3$: tuning charge order and narrow gap towards a Dirac metal
M. Dressel (1. Physikalisches Institut, Universität Stuttgart, Germany)

June 2 (Thu.)

Poster III

Chair: K. Ishii (JAEA)

P-41
Synthesis, doping control and Raman study of cuprate $HgBa_2Ca_2Cu_3O_{8+\delta}$
B. Loret (Laboratoire Matériaux et Phénomènes Quantiques (UMR 7162 CNRS), Université Paris Diderot-Paris 7, France)

P-42
Angle-resolved photoemission study of electronic structure of $BaFe_2As_2$ in the electronic "nematic" phase
K. Koshiishi (Department of Physics, University of Tokyo, Japan)

P-43
Optical spectroscopy of FeSe thin film
M. Nakajima (Department of Physics, Osaka University, Japan)

P-44
Neutron-scattering and muon spin rotation/relaxation studies on the spin correlations in $Pr_{1.4-x}La_{0.6}Ce_xCuO_4$
M. Fujita (Institute for Materials Research, Tohoku University, Japan)

P-45
Quantized Faraday and Kerr rotation and axion electrodynamics of the surface states of three-dimensional topological insulators
N. P. Armitage (The Institute for Quantum Matter, Department of Physics and Astronomy, The Johns Hopkins University, USA)

P-46
Electron Dynamics in n- and p-doped Topological Insulators
A. Sterzi (Department of Physics, Università degli Studi di Trieste, Italy)

P-48
Antiferroelectric like state in $BiFeO_3/LaFeO_3$ superlattices
H. Bouyanfif (LPMC EA2081, Université de Picardie Jules Verne, France)

P-49
Raman scattering investigation of $YMnO_3$ and $YbMnO_3$ structural phase transition
H. Bouyanfif (LPMC EA2081, Université de Picardie Jules Verne, France)

P-50
Topological Phase Transitions in Topological Insulators Driven by Dimensional Reduction and Substrate Control
K. I. Sim (Institute of Physics and Applied Physics, Yonsei University, Korea)

P-51
Topological heterodyne in a two dimensional electron gas
L. Bucciantini (Max Planck Institute for the Physics of Complex Systems, Germany)

P-52
Intertwined Charge Density Wave and Superconductivity in 2H-TaS_2 under Pressure
R. Grasset (Laboratoire Matériaux et Phénomènes Quantiques, Université Paris Diderot–Paris VII, France)

P-53
One-Dimensional Surface States on Bi/InSb(001)
Y. Ohtsubo (Graduate School of Frontier Biosciences, Osaka University, Japan)

P-54
Optical spectroscopy and pump-probe studies on charge density wave orders in $LaAgSb_2$
N. L. Wang (International Center for Quantum Materials, School of Physics, Peking University, China)

P-55
Optical Conductivity of Excitonic Insulator Ta_2NiSe_5 under High Pressure
H. Okamura (Department of Chemical Science and Technology, Tokushima University, Japan)

P-56
Rotating dipoles encapsulated in C_{60}
T. Rõõm (National Institute of Chemical Physics and Biophysics, Estonia)

P-57
NbN-Based Terahertz Superconducting Metamaterials
Y. C. Jo (Department of Physics and Institute of Physics and Applied Physics, Yonsei University, Korea)

P-58
Electronic structure of $Sr_{1-x}Ca_xFe_2(As_{1-y}P_y)_2$ (x = 0.08, y = 0.25) revealed by angle resolved photoemission spectroscopy
T. Adachi (Department of Physics, Osaka University, Japan)