

# Program

**Sunday, 4 June, 2017    Sendai Subway Tōzai Line "International Center" station 2F  
Wind terrace of greenery**

**15:00 - 18:00**

Registration

**18:00 - 20:00**

Welcome reception

<b>Monday, 5 June, 2017</b>		<b>Sendai International Center Tachibana (2F)</b>
8:00	- 9:00	<b>Registration</b>
9:00	- 9:15	<b>Welcome</b>
<b>Charge order &amp; Charge density wave 1</b>		
9:15	- 9:40	<b>Richard D. Averitt</b> Ultrafast dynamics and control in transition metal oxides
9:40	- 10:00	<b>Tadahiko Ishikawa</b> Photo-induced dynamics of $\text{Me}_4\text{P}[\text{Pt}(\text{dmit})_2]_2$
10:00	- 10:20	<b>Akira Takahashi</b> Photoinduced metal-insulator transition due to dynamical localization in $\alpha$ -type and $\kappa$ -type BEDT-TTF salts
10:20	- 10:40	<b>Yaroslav A. Gerasimenko</b> Microscopic imaging of the hidden state in electronic crystal
10:40	- 11:10	<b>Coffee break</b>
<b>Strongly correlated system</b>		
11:10	- 11:35	<b>Martin Eckstein</b> Manipulating correlated electron systems with short electric field transients
11:35	- 11:55	<b>Tatsuya Miyamoto</b> Probing ultrafast spin dynamics coupled with charge excitations in the cuprate Mott insulator $\text{Nd}_2\text{CuO}_4$
11:55	- 12:15	<b>Yohei Kawakami</b> Ultrafast orbital excitation by 6 fs pulse in $\text{V}_2\text{O}_3$
12:15	- 14:00	<b>Lunch</b>
<b>Surface</b>		
14:00	- 14:25	<b>Dragan Mihailović</b> Metastability of mesoscopic quantum defects in electronic crystals excited by lasers pulses
14:25	- 14:50	<b>M. Horn-von Hoegen</b> 1D Atomic Wires at Surfaces: Ultrafast non-equilibrium structural dynamics in the $\text{Si}(111)\text{-In}(8\times 2)\leftrightarrow(4\times 1)$ system at the quantum limit
14:50	- 15:10	<b>Keiki Fukumoto</b> Spatial, temporal, and spectral observation of photo-excited states using fs-PEEM
15:10	- 15:30	<b>Chris W. Nicholson</b> Ultrafast Peierls Transition in $\text{In/Si}(111)$ nanowires probed by trARPES
15:30	- 16:00	<b>Coffee break</b>
<b>Superconductor 1</b>		
16:00	- 16:25	<b>Shik Shin</b> Time-resolved ARPES study on multi-orbital Fe superconductors
16:25	- 16:50	<b>Daniele Nicoletti</b> Signatures of non-equilibrium superconductivity in high-temperature $\text{K}_3\text{C}_{60}$
16:50	- 17:10	<b>Daniele Fausti</b> Mid-IR control of local charge order in optimally doped superconducting Y-B2212
17:10	- 17:30	<b>Giacomo Mazza</b> Non-equilibrium superconductivity in driven alkali-doped fullerenes
17:30	- 19:30	<b>Poster session</b>

**Tuesday, 6 June, 2017****Sendai International Center Tachibana (2F)****Strong field-matter coupling 1**

9:00	-	9:25	<b>Fabian Langer</b> Terahertz-lightwave acceleration: Quasiparticle collisions and high-harmonic wave-shaping
9:25	-	9:50	<b>Koichiro Tanaka</b> Higher-order harmonic generation in monolayer materials
9:50	-	10:15	<b>Takashi Oka</b> Floquet engineering: Dynamically generating Dirac, Weyl, and Landau states
10:15	-	10:35	<b>Etienne Janod</b> A microscopic mechanism for the electric-field-induced out-of-equilibrium properties of Mott insulators
10:35	-	11:05	Coffee break
<b>Strong field-matter coupling 2</b>			
11:05	-	11:30	<b>Peter Prelovšek</b> Many-body localization – search for an ideal nonequilibrium system
11:30	-	11:50	<b>Laurent Cario</b> A single component artificial neuron using new states of matter created in Mott Insulators under electric field
11:50	-	12:15	<b>Shinichiro Iwai</b> Dressed charge state induced by driving field of 6-fs infrared light in organic dimer Mott system
12:15	-	14:00	Lunch
<b>Magnetism 1</b>			
14:00	-	14:25	<b>Eric Collet</b> Watching and controlling structural coherence during photoinduced spin state switching
14:25	-	14:50	<b>Shin-ichi Adachi</b> Visualizing chemical reactions in solution with femtosecond X-ray scattering
14:50	-	15:15	<b>Maciej Lorenc</b> Long-range interactions following laser excitations launched into a material
15:15	-	15:40	<b>Alexey V. Kimel</b> Cold opto-magnetic recording at the edge of time
15:40	-	16:10	Coffee break
<b>Magnetism 2</b>			
16:10	-	16:35	<b>Theo Rasing</b> Ultrafast manipulation of dielectric and magnetic states
16:35	-	17:00	<b>Tobia F. Nova</b> An effective magnetic field from optically driven phonons
17:00	-	17:20	<b>Jae D. Lee</b> Subfemtosecond demagnetization and spin transport
17:20	-	17:45	<b>Sumio Ishihara</b> Optical manipulation of magnetism in a correlated electron system
17:45	-	19:45	<b>Poster session</b>

Wednesday, 7 June, 2017

Sendai International Center Tachibana (2F)

Plenary

9:00 - 9:45 **Keith A. Nelson**  
From THz to X-rays: New experimental methods for study of photoinduced phase transitions

Charge order & Charge density wave 2

9:45 - 10:10 **Keisuke Tominaga**  
Vibrational dynamics of the CO stretching of 9-fluorenone and its derivatives studied by visible-pump and infrared-probe spectroscopy

10:10 - 10:30 Coffee break

10:30 - 10:55 **Uwe Bovensiepen**  
Excitations driven by femtosecond laser pulses in complex materials: Challenges and opportunities

10:55 - 11:15 **Igor Vaskivskyi**  
Interplay between different photo- and current induced orders in 1T-TaS<sub>2</sub> revealed by STM and optical time-resolved spectroscopy

11:15 - 11:40 **Kenji Yonemitsu**  
Photoinduced enhancement of anisotropic charge correlations in quarter-filled triangular systems with trimers

11:40 - 12:00 **Hirotake Itoh**  
Time-domain THz spectroscopy of photoinduced phase transition in charge ordered organic ferroelectrics  $\alpha$ -(ET)<sub>2</sub>I<sub>3</sub>

12:30 - 17:20 **Lunch & Excursion (Matsushima)**

**Thursday, 8 June, 2017****Sendai International Center Tachibana (2F)****Plenary**

9:00 - 9:45 **Yoshinori Tokura**  
Photoinduced phenomena in quantum topological materials

**Structure change**

9:45 - 10:10 **Chong-Yu Ruan**  
Imaging dynamical scaling responses of photoinduced phase transitions by femtosecond coherent electron beams

10:10 - 10:30 **Roman Bertoni**  
Carrier and lattice dynamics in  $WSe_2$

10:30 - 11:00 Coffee break

11:00 - 11:25 **Jure Demšar**  
Cooperative atomic motion probed by femtosecond electron diffraction

11:25 - 11:50 **Masaki Hada**  
Molecular dynamics of photofunctionalized liquid crystals

11:50 - 12:10 **Claire Daniele Laulhe**  
Photo-induced phase transition between charge density wave states in  $1T-TaS_2$

12:10 - 12:30 Conference photo

12:30 - 14:20 Lunch

**Ferroelectrics 1**

14:20 - 14:45 **Steven L. Johnson**  
A direct view of coherent structural dynamics in ferroelectrics and ferromagnets with femtosecond x-ray diffraction

14:45 - 15:10 **Hiroshi Okamoto**  
Terahertz-field-induced Mott transition and ferroelectricity in correlated electron materials

15:10 - 15:30 **Kaoru Iwano**  
Photoinduced ultrafast disappearance of ferroelectricity observed in a hydrogen-bonded ferroelectric crystal of croconic acid

15:30 - 16:00 Coffee break

**Ferroelectrics 2**

16:00 - 16:25 **Yoichi Okimoto**  
Ultrafast polarity control of solids studied by time-resolved femtosecond spectroscopy

16:25 - 16:45 **Selene Mor**  
Ultrafast electronic band gap control in an excitonic insulator

16:45 - 17:05 **Noriaki Kida**  
Terahertz radiation by photoinduced ionic to neutral phase transition in tetrathiafulvalene-p-chloranil (TTF-CA)

18:30 - 20:30 **Conference dinner (Hotel Metropolitan Sendai)**

**Friday, 9 June, 2017**

**Sendai International Center Tachibana (2F)**

**Superconductor 2 & Topological insulator**

9:00	-	9:25	<b>Thomas P. Devereaux</b> Optical materials design of transition-metal dichalcogenides and frustrated Mott insulators
9:25	-	9:50	<b>Ryo Shimano</b> Higgs mode in conventional and unconventional superconductors
9:50	-	10:10	<b>Naoto Tsuji</b> Nonlinear light-Higgs coupling in superconductors: Effects of the phonon-mediated retarded interaction
10:10	-	10:40	Coffee break
10:40	-	11:05	<b>Philipp Werner</b> Signatures of electron-boson interactions in photo-doped Mott insulators
11:05	-	11:30	<b>Naoki Ogawa</b> Photocurrent generation with topology and Berry phase
11:30	-	11:50	<b>Yann Gallais</b> Nematic quantum critical point and collective resonant mode in iron- based superconductors
11:50	-	12:15	<b>Shinya Koshihara</b> Ultrafast photo-control of charge-structure coupled order in Strongly correlated matters utilizing hidden state
12:15	-	12:30	<b>Closing</b>
<b>Departure</b>			