

Transformative Research Areas (A) Unveiling, Design, and Development of Asymmetric Quantum Matters
International Conference on Asymmetric Quantum Matters (Asymmetry 2026) @Osaka Univ.

2026/9/20

Thu, Sep 24, 2026

[MC: OTUSKI, Junya]		
9:30 - 10:15	OIWA, Rikuto (Hokkaido University)	Tutorial (Theory): Multipole description of the electronic degrees of freedom and relevant functionality
10:15 - 10:45	Break	
10:45 - 10:55	Opening	ONIMARU, Takahiro
[Chair: ONIMARU, Takahiro]		
10:55 - 11:25	IZAWA, Koichi (Univ. Osaka, Japan)	Resolving Nonlinear Conductivity Tensors in Magnetic Toroidal Compounds
11:25 - 11:55	KIMATA, Motoi (JAEA, Japan)	Nonreciprocal transport studies by using FIB microfabrication techniques
11:55 - 14:25	Lunch and Poster session (I) [12:40~14:25]	
14:25 - 14:40	Break	
[Chair: KIMATA, Motoi]		
14:40 - 15:10	GUO, Chunyu (MPSD, Germany)	Interweaving electronic orders and Collective Quantum Effects in Kagome Materials
15:10 - 15:40	KOTEGAWA, Hisashi (Kobe Univ., Japan)	Development of even-parity multipolar magnets
15:40 - 16:00	DEVI, SHEETAL (Kyushu Institute of Technology)	Direct observation of piezoelectricity from electric toroidal quadrupole driven parity breaking in $\text{Cd}_2\text{Re}_2\text{O}_7$
16:00 - 16:20	ISHITOBI, Takayuki (Tohoku University)	Tensor-based description of crystals for efficient analysis of physical properties
16:20 - 16:45	Break	
[Chair: IZAWA, Koichi]		
16:45 - 17:15	LEE, SungBin (KAIST, Korea)	Exotic phenomena in quasicrystals
17:15 - 17:45	MATSUBARA, Masakazu (Univ. Osaka, Japan)	Nonlinear Optics of Asymmetric Quantum Matters: Visualizing, Controlling, and Designing Symmetry-Broken States
17:45 - 18:05	YAMAMOTO, Rikako (Max Planck Institute for Chemical Physics of Solids, Germany)	Geometrical engineering of antiskyrmion nucleation in Heusler nanowires
18:05 - 18:25	UKLEEV, Victor (Helmholtz-Zentrum Berlin, Germany)	Anisotropy of mesoscale spin textures unveiled by resonant small-angle x-ray scattering
18:25 - 19:50	Light meal @Assembly Hall	

Fri, Sep 25, 2026

[Chair: YOSHIDA, Hiroyuki]		
9:00 - 9:30	FRANCHINI Cesare (Univ. Vienna, Austria & Univ. Bologna, Italy)	Hidden multipolar orders and polarons in spin-orbit entangled correlated insulators
9:30 - 10:00	ZIVKOVIC, Ivica (EPFL, Switzerland)	Magnetic field effect on structural domains in a 5d ¹ multipolar system
10:00 - 10:20	HIRAI, Daigorou (Nagoya University)	Quadrupolar ordering in the 5d ² Re-based double perovskite Ba ₂ YReO ₆
10:20 - 10:45	Break	
[Chair: OTUSKI, Junya]		
10:45 - 11:15	HAYAMI, Satoru (Hokkaido Univ., Japan)	Multipole Descriptions of Unconventional Quantum States of Matter
11:15 - 11:35	TANG, Nan (University of Augsburg, Germany)	Electrical observation via spin Seebeck effect of fractionalized excitations in a magnetic insulator
11:35 - 11:55	KIRIKOSHI, Akimitsu (Okayama University)	Intrinsic anomalous Hall effect driven by nonlocal Kondo exchange interaction in localized antiferromagnetic metals
11:55 - 14:25	Group Photo	
	Lunch and Poster session (II) [12:40~14:25]	
14:25 - 14:40	Break	
[Chair: KOBAYASHI Tasuo]		
14:40 - 15:10	PUEBLA, Jorge (Koyto Univ., Japan)	Nonlinear responses in hybrid magnetoelastic waves
15:10 - 15:40	GAUTHIER, Nicolas (INRS, Canada)	Decoupling of magnetic and electric susceptibilities in a Kramers paramagnet
15:40 - 16:00	Break	
[Chair: OHARA, Shigeo]		
16:00 - 16:30	HATTORI, Kazumasa (Tokyo Metropolitan Univ., Japan)	Chirality orders and fluctuations in electronic systems
16:30 - 16:55	NOVAK, Mario (Zagreb University, Croatia)	Tuning magnetic complexity in EuAg _x Sb ₂ via Eu-Sr substitution
16:55 - 17:35	DE VISSER, Anne (University of Amsterdam)	Superconductivity in the Dirac semimetal PdTe ₂
18:00 - 20:00	Networking Event @ Cafeteria Kasane	

Sat, Sep 26, 2026

[MC: KOBAYASHI, Kaya]		
9:00 - 9:45	MEASSON, Marie-Aude (CNRS, Institut Néel, France)	Tutorial (Experiment): Raman scattering investigation on crystalline electric field effect in rare-earth-based compounds
9:45 - 10:15	Break	
[Chair: HATTORI, Kazumasa]		
10:15 - 10:45	TABATA, Chihiro (JAEA, Japan)	Chiral Electric Quadrupole Order in URhSn Probed by Neutron and X-ray Diffraction
10:45 - 11:05	HAIDAMAK, Tetiana (Charles University, Czech)	Thermodynamic Evidence of Tetracritical Topology in H-T Phase Diagram of UTe_2 for H b
11:05 - 11:25	RUET, Simon (CEA Grenoble, France)	Thermoelectric power in the unconventional superconductor CeRh_2As_2
11:25 - 11:45	SATO, Takumi (Hokkaido University)	Gauge-invariant magnetic octupoles and physical responses in crystalline solids
11:45 - 12:05	FAURE, Quentin (LLB, France)	Non magnetic impurities as a quantum microscope of finite size effects in spin chains
12:05 -	Closing	