

INTERNATIONAL WORKSHOP

Novel Physics in Kagome Lattice Materials

October 5-8, 2026 | Yukawa Institute for Theoretical Physics, Kyoto University

Scientific Program

(as of October 8, 2026)

Talk format: Oct. 5, 7, and 8: 25 min + 5 min discussion, or 15 min + 5 min discussion
Oct. 6 (Japan-China Joint Session): 23 min + 7 min discussion

Monday, October 5

Workshop Day 1

Time	Speaker / Event	Presentation Title / Details
09:30-10:30	Registration	
10:30-10:40	Opening	
		Chair: Mark H. Fischer
10:40-11:10	Guo-qing Zheng	Loop current and superconducting gap symmetry in CsV ₃ Sb ₅ : insights from NMR/NQR under uniaxial and hydrostatic pressures
11:10-11:40	Shota Suetsugu	Loop current order above the charge density wave transition in a kagome metal
11:40-12:10	Minoru Yamashita	Observation of Anomalous Thermal Hall Effect in a Kagome Superconductor
12:10-12:40	Berthold Jaeck	Toward Quantum Criticality: Nematic Order and Orbital Selective Mott State in Partially Filled Kagome Flat Band
12:40-14:30	Lunch	
		Chair: Berthold Jaeck
14:30-15:00	Mark H. Fischer	Theory of switchable half-quantum flux rings of the kagome superconductor CVS
15:00-15:30	Qimiao Si	Quantum Criticality and Emerging Universality in Flat Band Systems
15:30-16:00	Takasada Shibauchi	Pairing symmetry in the V-based Kagome superconductors
16:00-16:30	Break	
		Chair: Qimiao Si
16:30-17:00	Swee Kuan Goh	Probing pressure-tuned superconductivity of RbV ₃ Sb ₅ and CsV ₃ Sb ₅ with self-field critical current
17:00-17:20	Harshit Agarwal	Charge density wave driven symmetry breaking in doped CsV ₃ Sb ₅
17:20-17:50	Discussion	Chairs: Hiroshi Kontani, Chunyu Guo (online)

Tuesday, October 6

Japan-China Joint Session

Time	Speaker / Event	Presentation Title / Details
<i>Chairs: Takasada Shibauchi (Japan side), Jian Wang (China side)</i>		
09:00-09:30	Chisa Hotta	Formation of kagome spin liquid
09:30-10:00	Shiliang Li 李世亮	Possible Dirac quantum spin liquid in a kagome antiferromagnet
10:00-10:30	Kwang-Yong Choi	Emergent physics in $s=1/2$ 3J kagome antiferromagnets
10:30-11:00	Break	
<i>Chairs: Swee Kuan Goh (Japan side), Jian Wang (China side)</i>		
11:00-11:30	Stephen Wilson	Charge correlations in AV_3Sb_5 compounds
11:30-12:00	Chao Cao 曹超	Novel magnetism and electronic structure of Cr-based kagome compounds
12:00-12:30	Xianxin Wu 吴贤新	Theory for exotic charge orders in kagome lattice
12:30-14:20	Lunch	
<i>Chairs: Guo-qing Zheng (Japan side), Tao Wu (China side)</i>		
14:20-14:50	Hongjun Gao 高鸿钧	Observation of inversion symmetry breaking in KV_3Sb_5
14:50-15:20	Chunyu Guo	Collective electrons in frustrated Kagome metals
15:20-15:50	Yong Baek Kim	Van Hove Singularities, Loop Current Fluctuations, and Superconductivity in Kagome Metals
15:50-16:20	Break	
<i>Chairs: Ming Yi (Japan side), Tao Wu (China side)</i>		
16:20-16:50	Rina Tazai	Theoretical study on chiral superconductivity in AV_3Sb_5
16:50-17:20	Jia-Xin Yin 殷嘉鑫	Phase sensitive evidence for PDW in kagome superconductors
17:20-17:50	Qianghua Wang 王强华	Theory for 2x2 PDW in kagome lattice
17:50-18:20	Discussion	<i>Chairs: Ziqiang Wang (Japan side), Zhenyu Wang (China side)</i>
18:45	Banquet	

Wednesday, October 7

Workshop Day 3 and Poster Session

Time	Speaker / Event	Presentation Title / Details
<i>Chair: Minoru Yamashita</i>		
09:00-09:30	Hiroyuki K. Yoshida	One-third magnetization plateau in quantum kagome antiferromagnets
09:30-10:00	Yasir Iqbal	Exchange-hierarchy-driven dimensional reduction in the distorted kagome magnet $YCa_3CrO_3(BO_3)_4$

Time	Speaker / Event	Presentation Title / Details
10:00-10:30	Max Hirschberger	Bond-density-wave orders induced by geometric frustration in a kagome metal
10:30-11:00	Break	
		<i>Chair: Kentaro Nomura</i>
11:00-11:30	Girsh Blumberg	Intertwined Kagome Metal Systems from the Raman Scattering Perspective
11:30-12:00	Yeongkwan Kim	Evidence of time-reversal symmetry breaking above charge density wave order in a kagome metal
12:00-12:30	Ming Yi	Symmetry-breaking in CsV ₃ Sb ₅ revealed by magneto- and strain-ARPES
12:30-14:20	Lunch	
		<i>Chair: Yeongkwan Kim</i>
14:20-14:50	Liang Wu	Scanning time-resolved magneto-optical studies on Kagome metals
14:50-15:20	Chennan Wang	Identification of Time-Reversal Symmetry Breaking in CsV ₃ Sb ₅ : Insights from μ SR and Optical Probes
15:20-15:50	Kentaro Nomura	Topological Phases of Exchange-Coupled Electrons in Kagome Lattice
15:50-16:20	Discussion	<i>Chairs: Chisa Hotta, Stephen Wilson</i>
16:20-18:20	Break / Poster Session	Toom Y206 & Room Y306

Thursday, October 8

Final Day

Time	Speaker / Event	Presentation Title / Details
		<i>Chair: Yasir Iqbal</i>
09:00-09:30	Takami Tohyama	Chern insulators in cavity-embedded kagome systems
09:30-10:00	Masafumi Udagawa	Spinon flat modes at the 1/3 magnetization plateau of Kagome magnet
10:00-10:30	Daniel Schultz	Interplay of loop currents, superconductivity, and disorder, in AV ₃ Sb ₅ kagome metals
10:30-11:00	Break	
		<i>Chair: Masafumi Udagawa</i>
11:00-11:20	Ryutaro Okuma	Discovery of a conductive 5d kagome oxide Nd ₄ Os ₃ ZnO ₁₄
11:20-11:40	Hikaru Takeda	Magnetic excitations in the one-third magnetization plateau of the kagome antiferromagnet In-Kapellasite probed by thermal transport
11:40-12:00	Discussion and Closing	<i>Chairs: Takami Tohyama, Yeongkwan Kim</i>

Poster Program

Wednesday, October 7, 16:20-17:50

Room Y206 | P1-P14

No.	Presenter	Poster Title
P1	Satyabrata Bera	Competing Charge and Magnetic Orders in Co_xTaS_2 Probed by Infrared Spectroscopy
P2	Qicheng Tian	ARPES study of the kagome antiferromagnet GdTi_3Bi_4
P3	Tristan Thebault	Reinvestigation of the CsV_3Sb_5 phase diagram under pressure using bulk thermodynamic probe
P4	Ankur Majumder	Topological perspective on the Mott metal-insulator transition in the modified periodic Anderson model
P5	Jianxin Huang	Prominent Intrinsic Orbital Hall Effect in the 135 Kagome Metal Family and Loop-Current Effects on Orbital Transport
P6	Daiki Sasamoto	Dynamical spin correlations in kagome antiferromagnets: Comparison of the Abrikosov fermion and Schwinger boson approaches beyond mean field
P7	Takahiro Anan	Nonreciprocal current induced by dissipation in time-reversal symmetric systems
P8	Worapon Phatcharasirinawakun	Anisotropic Bond-Current Susceptibilities and Loop-Current Topology in Kagome Systems
P9	Youichi Yamakawa	Various Quantum Orders and Chiral Superconductivity in Cr- and V-based Kagome Metals
P10	Shunichi Narumi	Band theory and differential K theory
P11	Nanse Esaki	Spin Nernst and thermal Hall effects of topological triplons in quantum dimer magnets on the maple-leaf and star lattices
P12	Xiaojing Liu	Correlation strength evolution of niobium halides
P13	Nimrod Bachar	Identifying Chiral Magnetic Excitations through Broadband Magneto-Optical Spectroscopy
P14	Keiki Ishida	Room-temperature ferrimagnet $\text{Co}_3\text{Mo}_{1-x}\text{Pt}_x$ thin films with flat band derived from Co-kagome lattice

Room Y306 | P15-P28

No.	Presenter	Poster Title
P15	Jun Zhan	Loop current and competing orders on the Kagome lattice
P16	Naoya Ohta	Variational Monte Carlo Study of Quantum Phases in the Hofstadter–Hubbard Model
P17	Taiki Kishimoto	Modulation of the nuclear spin relaxation rate by CDW orders in a superconducting state on the kagome lattice
P18	Yuma Murata	Nonreciprocal Transport Driven by Time-Reversal and Inversion Symmetry Breaking in Kagome Metals AV_3Sb_5
P19	Yuta Mochizuki	Thermodynamics and Magnetocaloric Effect of the Antiferromagnetic Kagome Ising Model
P20	Jun Oike	Magneto-optical effects driven by altermagnetism
P21	Dan Yamagata	Thermal Hall Effect in the Magnetization Plateaus of the $S = 1/2$ Kagome Antiferromagnetic Heisenberg Model
P22	Katsuhiro Morita	Quantum Magnetism of the Spin-1 Kagome-Antiferromagnet

No.	Presenter	Poster Title
P23	Yuki Yamazaki	Majorana-assisted nonlocal spin correlation in quasi-one-dimensional Kitaev spin liquids
P24	Seigo Nakazawa	Theory of switchable quasiparticle-interference chirality in loop-current-ordered phase of kagome metals
P25	Susumu Okubo	ESR Measurements of the 1/3 Magnetization Plateau Region in the $S = 1/2$ Kagome Lattice Antiferromagnet $\text{InCu}_3(\text{OH})_6\text{Cl}_3$
P26	Yusuke Nakai	Information Thermodynamics in Closed Quantum Many-Body Dynamics
P27	Kanta Kudo	Quantum geometric effect on multipole fluctuation
P28	Yuriko Baba	Cubic edge dispersion in a semi-Dirac Chern insulator