

# International Conference on Quantum Liquid Crystals 2023 (QLC2023)

## Poster Session 1

Tuesday, August 8, 2023

Academic Lounge 1&2, Hokkaido University

Poster No.	
PS1-01	<b>Ryotaro Sano (Kyoto University)</b> Surface acoustic waves-driven magnon valley Hall effect in atomically thin van der Waals antiferromagnets
PS1-02	<b>Risako Kikuchi (Nagoya University)</b> Electrical conductivity and screening effect of spin-1 chiral fermions scattered by charged impurities
PS1-03	<b>Yoshihiro Okamura (University of Tokyo)</b> Topological magneto-optical effect from skyrmion lattice
PS1-04	<b>Mina Udono (Chiba University)</b> Optical properties of the Wannier-Stark ladder and Stark shift of exciton in Mott insulators
PS1-05	<b>Hajime Ishikawa (University of Tokyo)</b> High magnetic field investigations of quantum spin liquid candidates based on the Cu-spin trimer
PS1-06	<b>Yuta Kimoto (Tohoku University)</b> Electric current induced resistivity anomaly in a helimagnet: indication of sliding motion
PS1-07	<b>Yuki Shiomi (University of Tokyo)</b> Unidirectional magnetoresistance in CoFeB/FeSe bilayer films
PS1-08	<b>Keisuke Adachi (Ibaraki University)</b> High Chern-number spin liquid states in perturbed Kitaev magnets
PS1-09	<b>Ryota Yambe (University of Tokyo)</b> Floquet engineering of magnetic interactions: Understanding based on the crystal symmetry lowering
PS1-10	<b>Rico Pohle (University of Tokyo)</b> Spin Nematics Meet Spin Liquids: Exotic Phases in the Spin-1 Bilinear-Biquadratic Model with Kitaev Interactions
PS1-11	<b>Takahiko Sasaki (Tohoku University)</b> Inelastic neutron scattering study on lattice dynamics at the 6K anomaly in the quantum spin liquid candidate $\kappa$ -(BEDT-TTF) <sub>2</sub> Cu <sub>2</sub> (CN) <sub>3</sub>
PS1-12	<b>Seigo Ogawa (Okayama University)</b> <sup>75</sup> As-NMR study of K <sub>2</sub> Cr <sub>3</sub> As <sub>3</sub>
PS1-13	<b>Satoshi Tsuchiya (Hokkaido University)</b> Ultrafast pump-probe reflectivity study in the normal state of quarter-filled organic superconductor
PS1-14	<b>Shusaku Imajo (University of Tokyo)</b> The BCS-BEC crossover in organic superconductors
PS1-15	<b>Masanori Kanemoto (Ritsumeikan University)</b> Hybrid-functional band structure of iron-based superconductors

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PS1-16	<b>Shun Okumura (University of Tokyo)</b> Helical instability of skyrmion strings induced by longitudinal spin-polarized currents
PS1-17	<b>Shunsuke Yoshizawa (National Institute for Materials Science)</b> Imaging the domain structure and topological defects of charge density waves of $2H\text{-NbSe}_2$ by scanning tunneling microscopy
PS1-18	<b>Taichi Terashima (National Institute for Materials Science)</b> In-plane nematic anisotropy revealed by interlayer resistivity measurements on the iron-based superconductor parent compound $\text{CaFeAsF}$
PS1-19	<b>Masaki Uchida (Tokyo Institute of Technology)</b> Control of magnetic ground states in largely strained $\text{Sr}_3\text{Ru}_2\text{O}_7$ films
PS1-20	<b>Kotaro Shimizu (University of Tokyo)</b> Emergent electric field and resonance dynamics in a one-dimensional chiral magnet driven by an AC magnetic field
PS1-21	<b>Tsutomu Momoi (RIKEN)</b> Dynamics of spin nematics revisited
PS1-22	<b>Kiyu Fukui (University of Tokyo)</b> Effect of a magnetic field on the Kitaev model coupled to environment
PS1-23	<b>Shingo Kobayashi (RIKEN CEMS)</b> Nuclear spin relaxation rate of nonunitary Dirac and Weyl superconductors
PS1-24	<b>Kodai Moriyama (University of Tokyo)</b> Quantum critical phenomena caused by gradual structural variations in $\text{SrCo}_2(\text{Ge}_{1-x}\text{P}_x)_2$
PS1-25	<b>Akane Inda (Hokkaido University)</b> Third-order transverse magnetic susceptibility under ferro-axial ordering
PS1-26	<b>Masahiro Naritsuka (RIKEN)</b> Superconductivity in the monolayer $\text{NbSe}_2$ twisted on graphene
PS1-27	<b>Miho Tanaka (Ibaraki University)</b> Numerical study of the inverse Faraday effect in dissipative Rashba electron systems
PS1-28	<b>Hiroki Shoji (Osaka Metropolitan University)</b> Systematic evaluation of exchange interactions using collective excitation of chiral spin solitons
PS1-29	<b>Akira Iyo (National Institute of Advanced Industrial Science and Technology (AIST))</b> Novel superconductors in antiperovskite transition metal pnictides
PS1-30	<b>Yuki Amari (Keio University)</b> Realization of spin nematic Skyrmion crystals in cold atom systems

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PS1-31	<b>Koki Satow (Nagoya University)</b> Hall conductivity in an effective model of spin-1 fermions
PS1-32	<b>Yutaka Akagi (University of Tokyo)</b> Topological magnetism in quantum spin-nematics
PS1-33	<b>Takenori Fujii (University of Tokyo)</b> Non-linear electrical conductivity and Kosterlitz-Thouless(KT) transition in underdoped Bi-2223
PS1-34	<b>Jushin Tei (Osaka University)</b> Eliashberg analysis and topological crystalline superconducting states in $UTe_2$ with time-reversal symmetry
PS1-35	<b>Yasuyuki Kato (University of Tokyo)</b> Hidden topological transitions in emergent magnetic monopole lattices
PS1-36	<b>Ryo Okugawa (Tokyo University of Science)</b> Weyl superconductivity in multilayered quasicrystals
PS1-37	<b>Masahiro Hori (Tokyo University of Science)</b> Multifractality and Hyperuniformity in the Disordered Bose-Hubbard Model on Quasicrystals
PS1-38	<b>Ryoga Hiyoshi (Hokkaido University)</b> Quantum spin liquid state in $Pb_{(1-x)}Sr_xCuTe_2O_6$
PS1-39	<b>Takuya Nagashima (University of Tokyo)</b> Study on superconducting gap structure of $Fe(Se,S)$ from impurity effects
PS1-40	<b>Tetsuo Hanaguri (RIKEN CEMS)</b> Correlation-driven electronic nematicity in the Dirac semimetal $BaNiS_2$
PS1-41	<b>Fuki Sato (Tohoku University)</b> Metal-insulator transition in $Ru(Br_{1-x}I_x)_3$ with a honeycomb structure
PS1-42	<b>Ryutaro Okuma (University of Tokyo)</b> Neutron scattering studies of the candidate Kitaev material $Na_2PrO_3$
PS1-43	<b>Masahiro O. Takahashi (Osaka University)</b> Charge oscillation around a vacancy of Kitaev magnets
PS1-44	<b>Hiroya Nagato (Osaka University)</b> Third harmonic generation and Higgs mode excitation in s-wave superconductors using terahertz vortex beam
PS1-45	<b>Koki Mizuno (Nagoya University)</b> Majorana fermions in Fibonacci quasicrystal with spin orbital coupling

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PS1-46	<b>Yasuhiro Asano (Hokkaido University)</b> Physics of $j=3/2$ superconductors
PS1-47	<b>Kyohei Nakamura (Kyoto University)</b> Intrinsic Superconducting Diode Effect and Decoupling Transition due to Orbital Effect
PS1-48	<b>Reona Kondo (University of Tokyo)</b> Study on nematic superconductivity in tetragonal Fe(Se, S) using bulk measurements
PS1-49	<b>Suguru Hosoi (Osaka University)</b> Valley-dependent charge transport under strain in bismuth
PS1-50	<b>Minoru Kanega (Chiba University)</b> DC current generation by two-color laser in graphene
PS1-51	<b>Katsuhiko Tanaka (University of Tokyo)</b> Magnetoresistance in a tunnel junction with an antiferromagnet $Mn_3Sn$
PS1-52	<b>Haruka Matsumoto (University of Tokyo)</b> Superconductivity in hexagonal zirconium telluride $Zr_6MTe_2$ ( $M = Fe, Co$ )
PS1-53	<b>Toshihiko Muroi (University of Tokyo)</b> Magnetic field effects on the quadrupole order of the spin-orbit-coupled insulator $Ba_2MgReO_6$
PS1-54	<b>Keita Onodera (Hokkaido University)</b> Anomalous Dripping of Superfluid $^4He$ Droplets
PS1-55	<b>Jianxin Huang (Nagoya University)</b> Even- and Odd-Parity Intra-Unit-Cell Bond-Order and Emergence Nematicity in Kagome Metals
PS1-56	<b>Takao Watanabe (Hirosaki University)</b> BCS-BEC Crossover Observed in Te-annealed $FeTe_{1-x}Se_x$ Single Crystals
PS1-57	<b>Nanse Esaki (University of Tokyo)</b> Electric field controllable thermal Hall effect of triplons in quantum dimer magnets $XCuCl_3$ ( $X = TI, K$ )
PS1-58	<b>Yoshihiko Ihara (Hokkaido University)</b> $^{27}Al, ^{55}Mn$ -NMR study for itinerant kagome antiferromagnet $Sc_3Mn_3Al_7Si_5$
PS1-59	<b>Ryuma Nagatomo (Hokkaido University)</b> Quantized Dripping Period of Superfluid $^4He$

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## Poster Session 2

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Poster No.

PS2-01	<b>Yoshiaki Uchida (Osaka University)</b> Facile nanosheet synthesis using liquid crystals
PS2-02	<b>Yoshihiko Okamoto (University of Tokyo)</b> Superconductivity in Ternary Telluride $Sc_6MTe_2$ with $3d$ , $4d$ , and $5d$ Transition Metals
PS2-03	<b>Daigorou Hirai (Nagoya University)</b> Novel molecular orbital crystal and possible liquid crystal state in RuP
PS2-04	<b>Shengjie Fang (University of Tokyo)</b> Field dependent specific heat measurements of the Kitaev quantum spin liquid candidate $Na_2Co_2TeO_6$
PS2-05	<b>Toshiya Ikenobe (University of Tokyo)</b> Superconductivity induced by hole-doping in the nodal-line semimetal NaAlGe
PS2-06	<b>Takumi Sato (Hokkaido University)</b> Superconductivity with quasiparticle states below the gap
PS2-07	<b>Michiya Chazono (Kyoto University)</b> Finite-momentum Cooper pairing in few-layer transition metal dichalcogenides
PS2-08	<b>Youichi Yamakawa (Nagoya University)</b> Drastic magnetic-field-induced chiral current order and emergent current-bond-field interplay in kagome metal $AV_3Sb_5$ ( $A=Cs,Rb,K$ )
PS2-09	<b>Yuma Wada (Hokkaido University)</b> Temperature dependence of photoinduced carrier dynamics in the charge glass candidate $\theta$ -(BEDT-TTF) $_2$ CsCo(SCN) $_2$
PS2-10	<b>Hikaru Taneoka (Tohoku University)</b> Magnetotransport Properties of Itinerant Antiferromagnet LaMnSi
PS2-11	<b>Yasunori Toda (Hokkaido University)</b> Spatio-temporal dynamics of localized superconductivity generated by optical vortex pulse excitation
PS2-12	<b>Yuya Ikeda (University of Tokyo)</b> Photocurrent induced a bicircular light drive in centrosymmetric or rotational symmetric systems
PS2-13	<b>Taiki Kawamura (Nagoya University)</b> Theory of the electron correlation effect in the organic conductor (EDO-TTF-I) $_2$ ClO $_4$
PS2-14	<b>Kota Miyakoshi (Hokkaido university)</b> Superconductivity and magnetism in high- $T_c$ cuprate $La_2CuO_{4+5}$
PS2-15	<b>Kazushi Aoyama (Osaka University)</b> Half-quantum-shifted Little-Parks oscillation and d-vector texture in spin-triplet superconductors

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PS2-16	<b>Hirotake Itoh (Tohoku University)</b> Sub-picosecond manipulation of electronic-ferroelectric polarization in a rare-earth ferrite at room temperature
PS2-17	<b>Kanta Maruyama (Nagoya University)</b> Electronic structure of the nodal line semimetal candidate $\text{IrO}_2$
PS2-18	<b>Naoto Uematsu (Nagoya University)</b> Superconductivity in High-Entropy Antimonides
PS2-19	<b>Tatsuaki Mori (Ritsumeikan University)</b> Instability of Bogoliubov Fermi surfaces under magnetic field
PS2-20	<b>Yuto Muramatsu (Nagoya University)</b> Large magnetoresistance in distorted rutile-type oxide $\text{WO}_2$
PS2-21	<b>Yuichi Yamasaki (National Institute for Materials Science)</b> Anisotropic electronic state with non-collinear magnetic order controllable by tilted magnetic field cooling
PS2-22	<b>Takuya Aoyama (Tohoku University)</b> Piezomagnetic effect in antiferromagnetic $\text{MnTe}$ with broken time-reversal symmetry
PS2-23	<b>Kazutaka Kudo (Osaka University)</b> Non-monotonic variation of superconducting transition temperature in $\text{BaPtAs-BaPtSb}$ solid solution
PS2-24	<b>Koki Shimura (Nagoya University)</b> Chiral charge current with orbital ferromagnetism in loop-current order state in kagome lattice
PS2-25	<b>Tadashi Adachi (Sophia University)</b> Relationship between the Magnetism, Superconductivity and Electronic Nematicity in Iron-Chalcogenide $\text{FeSe}_{1-x}\text{S}_x$ Thin Films
PS2-26	<b>Akifumi Mine (University of Tokyo)</b> Study of the superconducting gap in the Kagome lattice superconductor $\text{CsV}_3\text{Sb}_5$ by low-temperature and high-resolution laser ARPES
PS2-27	<b>Tomohiro Kitano (Tohoku University)</b> Electronic Properties of Molybdenum Iodides with Cluster Structure
PS2-28	<b>Kenji Kawashima (IMRA Japan Co., Ltd)</b> Superconductivity in Ca-Free Cuprate with double $\text{CuO}_2$ layers
PS2-29	<b>Kaede Isomura (Tohoku University)</b> Superconductivity and spin correlations in $T^*$ -type cuprate
PS2-30	<b>Tatsuya Miki (Saitama University)</b> Physics of superconductor junction with Bogoliubov Fermi surface

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PS2-31	<b>Hung-Cheng Wu (Tohoku University)</b> Observation of temperature-induced piezomagnetic switching in $\text{Cu}_2\text{OSeO}_3$ polymorph synthesized under high-pressure
PS2-32	<b>Moeta Tsukamoto (University of Tokyo)</b> Simultaneous magnetic imaging using the nitrogen-vacancy center and magneto-optical Kerr effect
PS2-33	<b>Terunari Koshinuma (National Institute of Advanced Industrial Science and Technology)</b> Superconductivity in Ba-Ir-Ge ternary system
PS2-34	<b>Jun Tokimoto (Tokyo University of Science)</b> Analysis of Photo-Pumped Hubbard Model on a Square Lattice Using Dynamic Mode Decomposition
PS2-35	<b>Seiichiro Onari (Nagoya University)</b> Three-dimensional CDW order in kagome metal: Analysis of third-order term in three-dimensional GL theory
PS2-36	<b>Koichi Ichimura (Hokkaido University)</b> Charge disproportionation in organic conductors studied by STM
PS2-37	<b>Masamichi Nakajima (Osaka University)</b> Single-crystal growth and physical properties of iron-based superconductor $\text{Sr}_2\text{VFeAsO}_3$
PS2-38	<b>Hiroto Tanaka (Kyoto University)</b> Superconducting nonlinear responses in magnetic fields
PS2-39	<b>Koki Shinada (Kyoto University)</b> Orbital magnetoelectric effect induced by electric fields and temperature gradients in period metals
PS2-40	<b>Akira Kofuji (Kyoto University)</b> Unconventional gap dependence of high harmonic generation in the extremely strong light-matter coupling regime
PS2-41	<b>Shungo Nakagawa (University of Tsukuba)</b> Study of structural changes with doping levels in the cuprate superconductor $\text{Bi2212}$
PS2-42	<b>Akimitsu Kirikoshi (Hokkaido University)</b> Classification of Superconductivity in Multiorbital Systems by Multipoles
PS2-43	<b>Yoshihiko Togawa (Osaka Metropolitan University)</b> Enantiopure crystal growth of chiral inorganic compounds
PS2-44	<b>Jobu Matsuno (Osaka University)</b> Spin current generation from an epitaxial tungsten dioxide $\text{WO}_2$
PS2-45	<b>Shunsuke Nishimura (University of Tokyo)</b> Quantitative imaging of superconducting vortices penetrating a thin film using diamond quantum sensor

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PS2-46	<b>Ryuta Iwazaki (Saitama University)</b> Material-based analysis of organic Mott insulators
PS2-47	<b>Soichiro Yamane (Kyoto University)</b> Field-training-tunable charge order in kagome metal $\text{CsV}_3\text{Sb}_5$
PS2-48	<b>Mikiya Tomikawa (Kyoto University)</b> Measurement of the current-induced strain in $\text{BaMn}_2\text{As}_2$ using fiber Bragg grating
PS2-49	<b>Shingo Yonezawa (Kyoto University)</b> Anomalous in-plane anisotropy in the Kagome superconductor $\text{CsV}_3\text{Sb}_5$
PS2-50	<b>Shiori Sugiura (Tohoku University)</b> Noise spectroscopy in layered organic superconductor $\kappa\text{-(BEDT-TTF)}_2\text{Cu(NCS)}_2$
PS2-51	<b>Shigeru Kasahara (Okayama University)</b> Superconducting gap structure of tetragonal $\text{FeSe}_{1-x}\text{S}_x$ under high pressures
PS2-52	<b>Yutaro Mino (Tokyo University of Science, AIST)</b> Single crystal growth of high- $T_c$ superconductor $(\text{Hg,Re})\text{Ba}_2\text{Ca}_2\text{Cu}_3\text{O}_{8+\delta}$
PS2-53	<b>Hiroshi Watanabe (Ritsumeikan University)</b> Possibility of BCS-BEC crossover in unconventional superconductors
PS2-54	<b>Tomoya Asaba (Kyoto University)</b> Evidence for an odd-parity nematic phase above the charge density wave transition in kagome metal $\text{CsV}_3\text{Sb}_5$
PS2-55	<b>Shotaro Izutsu (Hokkaido University)</b> Charge density wave and superconductivity in $\text{ZrTe}_3$
PS2-56	<b>Yota Komiyama (Sophia University)</b> Spin Fluctuations of Single-Layer Bi-2201 Cuprate in the Heavily Overdoped Regime
PS2-57	<b>Shigetada Yamagishi (University of Tokyo)</b> Ferroaxial Transitions in Glaserite-type Compounds: Database Screening, Phonon Calculations, and Experimental Verification
PS2-58	<b>Asato Onishi (University of Tokyo)</b> Absence of conventional nematic susceptibility in kagome metal $\text{CsV}_3\text{Sb}_{5-x}\text{Sn}_x$
PS2-59	<b>Takahiro Nozue (Tokyo University of Science, AIST)</b> Pressure dependence of $T_c$ in TI-based high- $T_c$ cuprate superconductors