Poster Session (Day 3: Jan. 29, 13:30 – 15:00 at Takeda Hall)

P01	Satoshi Kashiwaya (AIST) Topological Superconductivity of Sr ₂ RuO ₄
P02	Sho Nakosai (University of Tokyo) Topological Superconductivity with Magnetic Material Attached on s-Wave Superconductor
P03	Alexandr V. Rozhkov (Russian Academy of Sciences) Majorana Fermions in Pinned Vortices
P04	Akira Oiwa (University of Tokyo) Supercurrent in Nb/InSb Nanowire Josephson Junctions
P05	Tomohiro Yokoyama (RIKEN) Anomalous Transport by Spin-Orbit Interaction in Semiconductor Nanowire Josephson Junction
P06	Ryohei Wakatsuki (University of Tokyo) Transport Property of Ladder InSb Nanowire System
P07	Henri Saarikoski (RIKEN) Topological Transitions of Spin Geometric Phases in Quantum Rings
P08	Sandor Bordács (University of Tokyo) Landau Level Spectroscopy of Dirac Electrons in a Polar Semiconductor with Giant Rashba Spin Splitting
P09	Naoki Ogawa (RIKEN) Spin Photocurrent in Bulk Rashba Semiconductor BiTeX
P10	Takashi Oka (University of Tokyo) Floquet Theory of Photo-Induced Topological Phase Transitions
P11	Masahiro Sato (Aoyama Gakuin University) Laser-Induced Magnetization Curves and a Topological Plateau State in Quantum Magnets
P12	Ko Kikutake (University of Tokyo) Zero-Energy Edge States in Silicene Nanodisks
P13	Denis Maryenko (RIKEN) MgZnO/ZnO Transport at Large Tilt Angle and in a Field up to 33 Tesla
P14	Joseph Falson (University of Tokyo) Odd Even-Denominator Fractional Quantum Hall Physics in ZnO
P15	Kyoichi Suzuki (NTT Basic Research Laboratories) Two-Dimensional Topological Insulating Phase in InAs/GaSb Heterostructures
P16	Koji Kobayashi (Sophia University) Emergent Critical Phenomena in Disordered Dirac Semimetal in 3D

Bohm-Jung Yang (RIKEN)

Quantum Criticality of Topological Phase Transitions in 3D Interacting Electronic Systems

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P18 **Ryutaro Yoshimi** (University of Tokyo)

Dirac Electron States Formed at Heterointerface between a Topological-Insulator and a Conventional Semiconductor

P19 **Jobu Matsuno** (RIKEN)

Engineering Spin-Orbital Magnetic Insulator by Tailoring Superlattices

P20 **Kei Shinada** (University of Tokyo)

Surface and Bulk Electronic Structures of Ternary Topological Insulators

P21 **Kosuke Saito** (University of Tokyo)

Fermi Level Tuning of 3D Topological Insulator Bi₂Te₃ by Electrochemical Cu-Intercalation

P22 **Masato Sakano** (University of Tokyo)

Observation of Out-of-Plane Spin Polarization at the Brillouin Zone Corners in Noncentrosymmetric Transition Metal Dichalcogenide

P23 Yu Saito (University of Tokyo)

Two Dimensionality in Electric Field Induced Superconductivity

P24 Ayako Yamamoto (RIKEN)

Bismuth Dichalcogenides, BiX_2 (X=S, Se) with X_2 Dimer

P25 Hideaki Sakai (University of Tokyo)

Electron-Doping-Induced Insulator-to-Superconductor Transition in a BiS_2 -Based Superconductor $Sr_{1-x}La_xFBiS_2$

P26 **Shintaro Takayoshi** (NIMS)

Field Theory of Symmetry Protected Topological Phase in Magnets

P27 **Aron J. Beekman** (RIKEN)

Liberating the Rotational Goldstone Modes in Quantum Liquid Crystals

P28 Nayuta Takemori (Tokyo Institute of Technology)

Local Electron Correlations in Quasi-Periodic Systems

P29 Keisuke Shibuya (AIST)

Strain Effect on the Metal-Insulator Transition Temperature in VO₂ Thin Films

P30 Takafumi Hatano (RIKEN)

Electrostatic Control of Metal-Insulator Transition in Thin Films of Strongly Correlated Manganites

P31 Neeraj Kumar (AIST)

Field Effect Transistor on SrTiO₃ Surface with Parylene-C/HfO₂ Hybrid Gate Insulator

P32 Kei S. Takahashi (RIKEN)

Magnetotransport Properties of Delta-Doped SrTiO₃ Grown by Metal Organic Gas Source Molecular Beam Epitaxy

P33 Yuya Matsubara (RIKEN)

Polar Metallic State in La-Doped BaTiO₃ Film Grown by Gas Source Metal Organic Hybrid Molecular Beam Epitaxy

P34 Masao Nakamura (RIKEN)

Photovoltaic Effect and Induced Polar State in Heterojunctions of LaFeO₃

P35 Suvankar Chakraverty (RIKEN)

Topological Spin Textures in Centro-Symmetric Oxide Thin Films and Interfaces

P36 **Jun Fujioka** (University of Tokyo)

Spin-Orbital Superstructure in Strained Ferrimagnetic Perovskite Cobalt Oxide

P37 Samuel Tardif (RIKEN)

X-Ray Imaging of All-in/All-out Magnetic Domains in the Pyrochlore Cd₂Os₂O₇

P38 **Kentaro Ueda** (University of Tokyo)

Anomalous Domain-Wall Conductance in Pyrochlore-Type $Nd_2Ir_2O_7$ on the Verge of Metal-Insulator Transition

P39 Youtarou Takahashi (University of Tokyo)

Magnetoelectric Resonance with Electromagnons in Helimagnet

P40 Toshiaki Tanigaki (RIKEN)

Split-Illumination Electron Holography

P41 **Junichi Iwasaki** (University of Tokyo)

Magnon-Skyrmion Scattering in Chiral Magnets: From the Viewpoint of Momenta Exchange

P42 Daisuke Morikawa (RIKEN)

Crystal Chirality and Skyrmion Helicity in MnSi and (Fe,Co)Si as Determined by TEM

P43 Yoichi Nii (RIKEN)

Elastic Properties of Skyrmion Crystal in MnSi

P44 **Tomoyuki Yokouchi** (University of Tokyo)

Stability of Two-Dimensional Skyrmions in Thin Films of $Mn_{1-x}Fe_xSi$ as Investigated by Topological Hall Effect

P45 **Kiyou Shibata** (University of Tokyo)

Observation of Skyrmions and their Helicity in Composition-Spread Helimagnets $Mn_{1-x}Fe_xGe$

P46 **Sunao Shimizu** (RIKEN)

Electrochemically Induced Large Magnetic Moments in Pt through Ionic Liquid Gating

P47 **Hiroki Isobe** (University of Tokyo)

Enhancement of Spin-Orbit Interaction by Electron Correlation

P48 **Satoru Hayami** (University of Tokyo)

Toroidal Order in Metals on Hexagonal Lattices

P49 Atsushi Tsurumaki-Fukuchi (AIST)

Ferroelectric Resistive Switching Effect in Dielectric/Ferroelectric Heterostructures

P50 Fumitaka Kagawa (RIKEN)

Possible Quantum Tunneling of Ferroelectric Domain Walls

P51 Yusuke Tokunaga (RIKEN)

Magnetically Biased P-E Loop in a Multiferroic Orthoferrite

P52 Hiroshi Oike (RIKEN)

A Generalized Mott Transition in a Doped Superconductor

P53 **Hiroyasu Koizumi** (University of Tsukuba)

Spin-Vortex-Induced Loop Currents in High T_c Cuprate Superconductors

P54 **Yusuke Nomura** (University of Tokyo)

Ab Initio Downfolding Method for Electron-Phonon Coupled Systems: Application to Iron-Based and C₆₀ Superconductors

P55 Franco Nori (RIKEN & University of Michigan)

Phase Separation in Systems with Imperfect Nesting, Including Pnictides and Graphene

P56 Hidehiro Asai (AIST)

The Effect of Inter-Band Phase Fluctuations on Macroscopic Quantum Tunneling with Multi-Gap Superconducting Josephson Junctions

P57 **Taichiro Nishio** (Tokyo University of Science)

Experimental Approach to Observe a Topological Soliton in Multiband Superconductors

P58 Yasumoto Tanaka (AIST)

First Order Phase Transition below the Superconducting Transition Temperature in Frustrated Multi-Band Superconductors

P59 Takashi Yanagisawa (AIST)

Nambu-Goldstone Bosons, Higgs Particles and Leggett Modes in Superconductors and an Analogy to the Theory of Elementary Particles

P60 Takashi Nakajima (RIKEN)

Scaling-up Spin Qubits in Semiconductor Quantum Dots

P61 Tomohiro Otsuka (RIKEN)

Fast Single Spin Operation in Semiconductor Quantum Dots

P62 **Rui Li** (Beijing Computational Science Research Center & RIKEN)

Controlling a Nanowire Spin-Orbit Qubit via Electric-Dipole Spin Resonance

P63 Neill Lambert (RIKEN)

Photon-Mediated Electron Transport in Hybrid Circuit-QED

P64 **Giles Allison** (University of Tokyo)

Coupling between Single Photons and Single Electron Spins in Gate-Defined Double Quantum Dots

P65 Giorgos Giavaras (RIKEN)

Tunable Quantum Dots in Graphene

P66 **Shuji Nakamura** (AIST)

Temperature and Magnetic Field Dependence of a SINIS Single Electron Pump

P67 **Michihisa Yamamoto** (University of Tokyo)

Electron Flying Qubit and Measurement of the Kondo Phase Shift

P68 Akihiro Ishii (University of Tokyo)

Giant Circular Dichroism in Individual Carbon Nanotubes

P69 **Masahiro Yoshida** (University of Tokyo)

Spontaneous Exciton Dissociation in Carbon Nanotubes

P70 **Takuya Matsuda** (Osaka Prefecture University)

Theory of Luminescence from Weakly Confined Excitons with Anomalous Radiative Correction

P71 Natsuko Ishida (RIKEN)

Photoluminescence of a Coupled Quantum Dot-Microcavity System in the Quantum Strong-Coupling Regime

P72 Ryosuke Hata (Osaka Prefecture University)

Up-Conversion of Photon Energy by Two-Level Molecule Coupled to Highly-Detuned Nano-Antenna

P73 **Takashi Shimada** (University of Tokyo)

Optical Control of Individual Carbon Nanotube Emitters by Spectral Double Resonance in Silicon Microdisk Resonators

P74 Yutaka Shikano (Institute for Molecular Science)

Visualization of Polarized Quantum State with Optical Vortex Beam

P75 Xinyou Lü (RIKEN)

Quantum-Criticality-Induced Strong Kerr Nonlinearities in Optomechanical Systems

P76 **Tsubasa Ichikawa** (Gakushuin University)

Implementing Continuous Variable Quantum Key Distribution with Discrete Modulations

P77 **Yujiro Eto** (Gakushuin University)

Control of Spins of Bose-Condensed Atoms

P78 Atsushi Noguchi (Osaka University)

Quantum Superposition of Crystalline Structure in Linear Paul Trap

P79 **Shunsuke Furukawa** (University of Tokyo)

Global Phase Diagram of Two-Component Bose Gases in a Time-Reversal-Invariant Gauge Field

P80 **Ebubechukwu O. Ilo-Okeke** (National Institute of Informatics)

Improved Deutsch's Algorithm Using Nondestructive Imaging of Bose-Einstein Condensates

P81 **Elham Hosseini** (Osaka City University)

Implementation of Two-Qubit Gate Operation on Selected Neutral Atom Qubits

P82 **Kenji Toyoda** (Osaka university)

Quantum Simulation of the Jaynes-Cummings-Hubbard Model Using Trapped Ions

P83 Hikaru Wakaura (University of Tsukuba)

Simulation of Grover's Search Algorithm Using the Spin-Vortex-Induced Loop Currents in the Cuprate

P84 **Keisuke Fujii** (Kyoto University)

Measurement-Free Topological Protection Using Dissipative Feedback

P85 Akinori Kagawa (Osaka University)

Towards Quantum Simulation of Magnetic Phase Transition Using Highly Polarized Nuclear Spins

P86 Makoto Negoro (Osaka University)

Quantum Non-Demolition Measurement with Nuclear Spin Amplification

P87 Zeliang Xiang (RIKEN)

Hybrid Quantum Circuit Consisting of a Superconducting Flux Qubit Coupled to a Spin Ensemble and a Transmission-Line Resonator

P88 Takeji Takui (Osaka City University)

Molecular Optimization of Synthetic Electron Spin Qubits and Ensemble Electron Spin Manipulation Technology for QC/QIP

P89 Kazunobu Sato (Osaka City University)

Novel Quantum Coherence in a High Nuclear-Spin Degenerate System Observed by Pulsed ESR Spectroscopy

P90 **Kenji Sugisaki** (Osaka City University)

Towards Quantum Chemistry by Quantum Computing from the Quantum Chemist's Side

P91 Satoru Yamamoto (Osaka City University)

Pulse Sequences of Adiabatic Quantum Computing in a Molecular Spin Quantum Computer