29th International Conference on Low Temperature Physics (LT29) at Sapporo Convention Center

JST	Day1 18-Aug(Thu.)	Day2 19-Aug(Fri.)	Day3 20-Aug(Sat.)	Day4 21-Aug(Sun.)	Day5 22-Aug(Mon.)	Day6 23-Aug(Tue.)	Day7 24-Aug(Wed.)	JST	US west	US east	EU UK+1
9:00		**Special Symposium** 19A-S D. M. Lee (video message, 20) A. J. Leggett (30) J. A. Sauls (30) J. Saunders (30)	**Half Plenary** 20A-HP H. Y. Kee Y. Tokura D. Schuster M. W. Zwierlein (80 min./40 x 2)	**Half Plenary** 21A-HP N. Butch H. Ding J. Teufel T. Tomaru (80 min./40 x 2)	**Half Plenary** 22A-HP H. Hwang M. Yamamoto Y. Wang M. Sato (80 min./40 x 2)	**Prize** 23A-PR **London Prize** V. Vinokur Q.-K. Xue (90 min./45 x 2)	**Prize** 24A-PR **Award Ceremony** (10) **IUPAP Prize** S. Autti K. Wang Q. Ma (90 min./30 x 3)	9:00	17:00	20:00	2:00
9:30								9:30			
10:00								10:00	18:00	21:00	3:00
10:30			**Coffee Break** (30)	**Coffee Break** (30)	**Coffee Break** (30)	**Coffee Break** (30)		10:30			
11:00		**Coffee Break** (30)	**Invited & Contributed** 20A-SF# (100 min./ 30x2 + 20x2)	**Invited & Contributed** 21A-SF# *(90 min./ 30 + 20 x 3)	**Invited & Contributed** 22A-SF# (100 min./ 30x2 + 20x2)	**Invited & Contributed** 23A-SF# *(90 min./ 30 + 20 x 3)	**Coffee Break** (30)	11:00	19:00	22:00	4:00
11:30		**Plenary** 19A-P P. Jarillo-Herrero E. Andrei (90 min./45 x 2)					**IUPAP Prize** X. Liu M. Yankovitz M. S. Ikeda (90 min./30 x 3)	11:30			
12:00								12:00	20:00	23:00	5:00
12:30								12:30			
13:00	**Arrival and Registration**	**Lunch Break** (70)	**Lunch Break** (90)	**Public lecture** (in Japanese / Online)	**Lunch Break** (90)	**Lunch Break** (90)	**Lunch Break** (80)	13:00	21:00	0:00	6:00
13:30								13:30			
14:00		**Poster** On-site 1 (120 min.)	**Poster** On-site 2 (120 min.)		**Poster** On-site 3 (120 min.)	**Poster** On-site 4 (120 min.)	**Plenary** 24P-P1 M. H. Devoret Y. Matsuda (90 min./45 x 2)	14:00	22:00	1:00	7:00
14:30	**Opening** (40)							14:30			
15:00	**Prize** 18P-PR **Award Ceremony** (15) **London Prize** F. Steglich (45) **Award Ceremony** (5) **Simon Prize** J. Pekola (45)							15:00	23:00	2:00	8:00
15:30							**Coffee Break** (30)	15:30			
16:00		**Coffee Break** (30)	**Coffee Break** (30)		**Coffee Break** (30)	**Coffee Break** (30)		16:00	0:00	3:00	9:00
16:30					**Half Plenary** 22P-HP A. Mackenzie S. Paschen M. Simmons P. Bertet (80 min./40 x 2)		**Plenary** 24P-P2 S. W. Nam Y. Nakamura (90 min./45 x 2)	16:30			
17:00	**Coffee Break** (30)	**Invited & Contributed** 19P-SF# (100 min./ 30x2 + 20x2)	**Invited & Contributed** 20P-SF# (100 min./ 30x2 + 20x2)			**Invited & Contributed** 23P-SF#A *(90 min./ 30 + 20 x 3)		17:00	1:00	4:00	10:00
17:30	**Half Plenary** 18P-HP G. Fève E. Zeldov L. Skrbek R. Nomura (80 min./40 x 2)						**Closing** (30)	17:30			
18:00						**Coffee Break** (30)	**Departure**	18:00	2:00	5:00	11:00
18:30								18:30			
19:00						**Invited & Contributed** 23P-SF#B *(90 min./ 30 + 20 x 3)		19:00	3:00	6:00	12:00
19:30								19:30			
20:00								20:00	4:00	7:00	13:00
20:30								20:30			
21:00								21:00	5:00	8:00	14:00
21:30		**Poster** Remote 1 (120 min.)	**Poster** Remote 2 (120 min.)		**Poster** Remote 3 (120 min.)	**Poster** Remote 4 (120 min.)		21:30			
22:00								22:00	6:00	9:00	15:00
22:30								22:30			
23:00								23:00	7:00	10:00	16:00

*Some halls have different schedules.

Day1 - Aug. 18 (Thu)

		Hall 1
12:00		Arrival and Registration
14:20		Opening Ceremony
15:00	Prize	**Fritz London Memorial Prize and Simon Memorial Prize** chairs: W. Halperin, Y. Maeno
		Award Ceremony for Fritz London Memorial Prize presenter: Y. Okuda
15:15		**18P-PR-01 (15:15-16:00) Fritz London Memorial Prize** **$CeCu_2Si_2$ and $YbRh_2Si_2$: Strange cases of heavy-fermion superconductivity** **Frank Steglich**
16:00		**Award Ceremony for Simon Memorial Prize** presenter: R. Haley
16:05		**18P-PR-02 (16:05-16:50) Simon Memorial Prize** **Quantum thermodynamics in action – nanoscale electronic device approach** **Jukka Pekola**
16:50		16:50 - 17:20 Coffee Break

		Hall 1	Hall 2
17:20	Half Plenary	**Half Plenary** chairs: A. Tsukazaki, Y. Yanase	**Half Plenary** chairs: V. Eltsov, Y. Kawaguchi
		18P-HPA-01 (17:20-18:00) **Fractional statistics in anyon collisions** **Gwendal Fève**	**18P-HPB-01 (17:20-18:00)** **Quantum Turbulence in Helium Superfluids** **Ladislav Skrbek**
18:40		**18P-HPA-02 (18:00-18:40)** **SQUID-on-tip nanoscale thermal imaging: Glimpse into dissipation in quantum systems down to atomic scale** **Eli Zeldov**	**18P-HPB-02 (18:00-18:40)** **Quantum Crystallizations of ^{4}He Far from Equilibrium** **Ryuji Nomura**

Day2 - Aug. 19 (Fri)

Hall 1

9:00 — **Symposium**

Special Symposium: Physics of Superfluid Helium 3 - Past, Present, and Future — Sponsored by IMR Tohoku U. — chairs: W. Halperin, K. Shirahama

19A-S-01 (9:00-9:20)
The Discovery of Superfluid Helium-3 (video messeage)
David M. Lee

19A-S-02 (9:20-9:50)
What makes superfluid 3-He special?
Anthony J. Leggett

19A-S-03 (9:50-10:20)
Superfluid ^{3}He – *Nature's Gift to Physics*
James A. Sauls

19A-S-04 (10:20-10:50)
Superfluid ^{3}He; a perspective on future prospects from materials science to fundamental physics.
John Saunders

10:50 — 10:50 - 11:20 Coffee Break

11:20 — **Plenary**

Plenary — Sponsored by JST-CREST — chairs: Q. Si, H. Fukuyama

19A-P-01 (11:20-12:05) — Supported by JST-CREST
The Magic of Moiré Quantum Matter
Pablo Jarillo-Herrero

19A-P-02 (12:05-12:50) — Supported by JST-CREST
The Magic of Atomically Thin Crystals
Eva Andrei

12:50 — 12:50 - 14:00 Lunch Break

14:00 — 14:00 - 16:00 Poster Session

16:00 — 16:00 - 16:30 Coffee Break

	Hall 1	Hall 2	Hall 3	Hall 4	Hall 5
16:30 — **Invited&Contributed**	**SF3 Quantum critical phenomena** chairs: N. Hussey K. Miyake	**SF1 Cold atom, BEC** chairs: I. Danshita Y. Tsutsumi	**SF4 Graphene and emerging materials** chairs: T. Wakamura T. Osada	**SF2 Superconductivity theory** chairs: Y. Asano D. Manske	**SF2 AV_3Sb_5** chairs: E. Hassinger Y. Iwasa
	19P-SF3-01 (16:30-17:00) Quantum Critical Metals: From Loss of Quasiparticles to High-Tc Superconductivity Qimiao Si	**19P-SF1-01** (16:30-17:00) Superfluids under External Driving Yuki Kawaguchi	**19P-SF4-01** (16:30-17:00) Tunable quantum Hall broken-symmetry orders in graphene Benjamin Sacepe	**19P-SF2A-01** (16:30-17:00) A solvable 3D Kondo lattice model exhibiting odd-frequency pairing and fractionalization. Alexei Tsvelik	**19P-SF2B-01** (16:30-17:00) Unconventional charge density wave order and superconductivity in the new class of topological kagome metals AV_3Sb_5 (A=K, Rb, Cs) Stephen Wilson
	19P-SF3-02 (17:00-17:30) Ferromagnetic quantum criticality Huiqiu Yuan	**19P-SF1-02** (17:00-17:30) Quantum magnonics at room temperature Yury Bunkov	**19P-SF4-02** (17:00-17:30) Quantum devices in graphene Klaus Ensslin	**19P-SF2A-02** (17:00-17:30) Beyond BCS: An Exact Model for Superconductivity and Mottness Philip Phillips	**19P-SF2B-02** (17:00-17:30) Topology and correlation driven exotic electronic phases in a kagome superconductor CsV_3Sb_5 Xianhui Chen
	19P-SF3-03 (17:30-17:50) Electro-nuclear transition in $YbRh_2Si_2$; evidence for a spin density wave Jan Knapp	**19P-SF1-03** (17:30-17:50) Dynamical optical lattices and driven transport of exciton-polariton condensates by microwave modulation Michael D. Fraser	**19P-SF4-03** (17:30-17:50) Directional Ballistics in Ultra-Pure Delafossite Metals Michal Moravec	**19P-SF2A-03** (17:30-17:50) Bogoliubov Fermi surfaces from pairing of j = 3/2 fermions on the pyrochlore lattice Shingo Kobayashi	**19P-SF2B-03** (17:30-17:50) Field-angle-resolved calorimetry of the Kagome superconductor CsV_3Sb_5 Shingo Yonezawa
18:10	**19P-SF3-04** (17:50-18:10) A mechanism for the strange metal phase in rare-earth intermetallic compounds Chung-Hou Chung	**19P-SF1-04** (17:50-18:10) Universal properties of dissipative Tomonaga-Luttinger liquids: A case study of a non-Hermitian XXZ spin chain Kazuki Yamamoto	**19P-SF4-04** (17:50-18:10) Theory and observation of topological Hall torque emerging from band topology Yasufumi Araki	**19P-SF2A-04** (17:50-18:10) Theory of Proximity effect in unconventional superconductor junctions -extension to parity mixing superconductors- Yukio Tanaka	**19P-SF2B-04** (17:50-18:10) Origin of superconductivity and CDW with/without time-reversal-symmetry breaking in kagome metals AV_3Sb_5 (A=K, Rb, CS) Rina Tazai

Poster 1 remote (21:00-23:00)

color code: SF1 SF2 SF3 SF4 SF5

Day3 - Aug. 20 (Sat)

Half Plenary

	Hall 1	Hall 2
9:00	**Half-Plenary** Sponsored by RIKEN-CEMS chairs: H. Ronnow, Y. Matsuda	**Half-Plenary** chairs: D. Konstantinov, S. Takada
	20A-HPA-01 (9:00-9:40) **Theoretical studies of frustrated Kitaev magnetic systems** Hae-Young Kee	**20A-HPB-01** (9:00-9:40) **Building qubits with electrons levitated above helium and neon** David Schuster
	20A-HPA-02 (9:40-10:20) **Emergent electromagnetic phenomena in topological magnets** Yoshinori Tokura	**20A-HPB-02** (9:40-10:20) **Spin, heat and Hall transport in strongly interacting quantum gases** Martin W. Zwierlein
10:20	10:20 - 10:50 Coffee Break	

Invited&Contributed

	Hall 1	Hall 2	Hall 3	Hall 4	Hall 5
10:50	**SF2 Non-centrosymmetric superconductors** chairs: Rina Tazai, S. Kittaka	**SF3 Frustrated magnets** chairs: Y. Kasahara H. Y. Kee	**SF4 Non-equilibrium** chairs: A. K. Huettel H. Akera	**SF2 Interface-2D superconductivity** chairs: A. Ikeda, A. Daido	**SF1 ^{4}He: other topics I** chairs: R. Haley Y. Shibayama
	20A-SF2A-01 (10:50-11:20) The Two-Phase Superconductor $CeRh_2As_2$ Elena Hassinger	**20A-SF3-01** (10:50-11:20) $SrCu_2(BO_3)_2$ – a Deep Purple crystal Henrik Ronnow	**20A-SF4-01** (10:50-11:20) Three-body correlation in nonequilibrium quantum liquid Kensuke Kobayashi	**20A-SF2B-01** (10:50-11:20) Tunnel Spectroscopy of Hybrid Superconducting Systems Elke Scheer	**20A-SF1-01** (10:50-11:20) Watching the decay of quantized vortex rings in superfluid helium-4 Wei Guo
	20A-SF2A-02 (11:20-11:50) Parity transition and topological superconductivity in a locally noncentrosymmetric superconductor $CeRh_2As_2$ Youichi Yanase	**20A-SF3-02** (11:20-11:50) Kagome Quantum Spin Liquids: the case of Herbertsmithite Philippe Mendels	**20A-SF4-02** (11:20-11:50) A single-electron toolbox for quantum applications assisted by sound waves Shintaro Takada	**20A-SF2B-02** (11:20-11:50) Spin-triplet superconductivity in nonmagnetic $CoSi_2$/$TiSi_2$ heterostructures Juhn-Jong Lin	**20A-SF1-02** (11:20-11:50) Rotating quantum wave turbulence and onset of the Kelvin wave cascade Jere Makinen
	20A-SF2A-03 (11:50-12:10) Parity Transition of Spin-Singlet Superconductivity in Locally Noncentrosymmetric Superconductor $CeRh_2As_2$ Shunsaku Kitagawa	**20A-SF3-03** (11:50-12:10) Spin liquid and nematic states in the spin-1 honeycomb Kitaev model with bilinear-biquadratic interactions Rico Pohle	**20A-SF4-03** (11:50-12:10) Antibunching of an electron pair surfing on sound Junliang Wang	**20A-SF2B-03** (11:50-12:10) Signatures of unconventional 2D superconductivity in a bulk van der Waals superlattice Aravind Devarakonda	**20A-SF1-03** (11:50-12:10) Friction-enhanced lifetime of bundled quantum vortices Luca Galantucci
	20A-SF2A-04 (12:10-12:30) $YbRh_2Si_2$/$^{174}YbRh_2Si_2$: Unconventional Superconductivity and Strange Metal Behavior Ha Duy Nguyen	**20A-SF3-04** (12:10-12:30) NMR evidence for Majorana gap in the Kitaev magnet Yasuhiro Shimizu	**20A-SF4-04** (12:10-12:30) Beating Carnot efficiency with periodically driven chiral conductors Sungguen Ryu	**20A-SF2B-04** (12:10-12:30) ^{17}O–NMR measurements on Sr_2RuO_4 near upper critical field Katsuki Kinjo	**20A-SF1-04** (12:10-12:30) Superfluid Suction Vortex Ken Obara
12:30	12:30 - 14:00 Lunch Break				
14:00	14:00 - 16:00 Poster Session				
16:00	16:00 - 16:30 Coffee Break				

Invited&Contributed

	Hall 1	Hall 2	Hall 3	Hall 4	Hall 5
16:30	**SF3 Exotic magnetism I** chairs: P. Mendels G. Q. Zheng	**SF2 Higgs, superconducting diode** chairs: E. Scheer K. Shiozaki	**SF4 Superconducting quantum computing** chairs: H. Shimada M. Sillanpää	**SF5 Electronic devices at low temperatures** chairs: M. Zgirski E. Kawakami	**SF1 Superfluid ^{3}He** chairs: T. Kita L. V. Levitin
	20P-SF3-01 (16:30-17:00) Possible spin-orbit entangled J-physics in Co compounds Je-Geun Park	**20P-SF2-01** (16:30-17:00) Higgs spectroscopy of unconventional superconductors in non-equilibrium Dirk Manske	**20P-SF4-01** (16:30-17:00) Realizing Quantum Error Correction with Superconducting Circuits Andreas Wallraff	**20P-SF5-01** (16:30-17:00) Resolving and mitigating correlated errors in superconducting qubits Rami Barends	**20P-SF1-01** (16:30-17:00) Superfluid Helium-3 Electromechanics John P. Davis
	20P-SF3-02 (17:00-17:30) Dynamic transition of current-driven single-skyrmion motion in a chiral-lattice magnet Licong Peng	**20P-SF2-02** (17:00-17:30) Superconducting Diode Effect in Rashba Superlattice Teruo Ono	**20P-SF4-02** (17:00-17:30) Quantum Computational Advantage Using a Superconducting Quantum Processor Supported by JST-CREST Xiaobo Zhu	**20P-SF5-02** (17:00-17:30) 500 microkelvin nanoelectronics Attila Geresdi	**20P-SF1-02** (17:00-17:30) Chiral superfluidity of helium-3 in quasi-two-dimensional limit Petri J. Heikkinen
	20P-SF3-03 (17:30-17:50) Tunable spin-valley coupling and nonreciprocal transport in polar Dirac metal $BaMnX_2$ (X=Sb, Bi) Hideaki Sakai	**20P-SF2-03** (17:30-17:50) Theory of intrinsic superconducting diode effect Akito Daido	**20P-SF4-03** (17:30-17:50) Generating families of three-qubit gates from simultaneous two-qubit gates Anton Frisk Kockum	**20P-SF5-03** (17:30-17:50) Integration of a cryogenic LC circuit to image-charge detection for surface electrons on helium Ivan Grytsenko	**20P-SF1-03** (17:30-17:50) Effect of Flow on the Spatial Arrangement of Chiral Domains in Superfluid ^{3}He-A Yuto Ikegai
	20P-SF3-04 (17:50-18:10) Multi-modal NMR spectroscopy of phase transitions in quantum materials Vesan F Mitrovic	**20P-SF2-04** (17:50-18:10) Supercurrent diode and magnetochiral effects in symmetric Josephson junctions Simon Reinhardt	**20P-SF4-04** (17:50-18:10) Tunability and High Coherence in Laser Annealed Superconducting Quantum Processors Hyunseong Kim	**20P-SF5-04** (17:50-18:10) An electron turnstile for frequency-to-power conversion Marco Marin Suarez	**20P-SF1-04** (17:50-18:10) Supercooling of the A Phase of ^{3}He Jeevak Parpia
18:10	Poster 2 remote (21:00-23:00)				

color code: SF1 SF2 SF3 SF4 SF5

Day4 - Aug. 21 (Sun)

Half Plenary

	Hall 1	Hall 2
9:00	**Half-Plenary** chairs: D. Agterberg, M. Sato	**Half-Plenary** chairs: Y. Nakamura, M. D. Fraser
	21A-HPA-01 (9:00-9:40) **Conjuction of Superconductivity, Magnetism, and Correlations in UTe2** **Nicholas Butch**	**21A-HPB-01** (9:00-9:40) **Recent Progress in Quantum Electromechanical Systems** **John Teufel**
	21A-HPA-02 (9:40-10:20) **Iron-based superconductors as a new Majorana playground** **Hong Ding**	**21A-HPB-02** (9:40-10:20) **Cryogenics in Gravitational Wave Telescope** **Takayuki Tomaru**
10:20	10:20 - 10:50 Coffee Break	

Invited&Contributed

	Hall 1	Hall 2	Hall 3	Hall 4	Hall 5
10:50	**SF3** **Heavy fermion** chairs: G. Zwicknagl D. Aoki	**SF2 SYMPOSIUM:** **Graphene** chairs: T. Shibauchi H. Ishizuka	**SF4** **Fractional quantum Hall effect & anyon** chairs: T. Kawarabayashi M. Hashisaka	**SF5** **Cryogenic techniques** chairs: P. Hakonen T. Tomaru	**SF1** **^{4}He: other topics II** chairs: J. Pollanen T. Matsushita
	21A-SF3-01 (10:50-11:20) Topology and Correlations in f-electron Materials Filip Ronning	**21A-SF2-01** (10:50-11:20) Plethora of Many-Body Ground States in Magic Angle Twisted Bilayer Graphene Supported by JST-CREST Dmitri Efetov	**21A-SF4-01** (10:50-11:20) Interferometry in the Fractional Quantum Hall Regime Michael J. Manfra	**21A-SF5-01** (10:50-11:20) Cryogenics for the Axion Dark Matter eXperiment Tatsumi Nitta	**21A-SF1-01** (10:50-11:20) Angular momentum in rotating superfluid droplets Andrey Vilesov
	21A-SF3-02 (11:20-11:40) $CeRh_2As_2$: The case for a quadrupolar density wave in a superconducting Kondo-lattice Daniel Hafner	**21A-SF2-02** (11:20-11:50) Superconductivity and magnetism in crystalline graphite allotropes Andrea Young	**21A-SF4-02** (11:20-11:40) Non-Abelian Anyon Collider June-Young M. Lee	**21A-SF5-02** (11:20-11:40) The CUORE cryostat: performance and operation of a world-leading millikelvin refrigerator Antonio D'Addabbo	**21A-SF1-02** (11:20-11:40) X-ray Structural Analysis of Adsorbed Helium Films on Graphite Akira Yamaguchi
	21A-SF3-03 (11:40-12:00) Origin of the low-temperature field-induced transition in $CeRhIn_5$ Ilya Sheikin	**21A-SF2-03** (11:50-12:20) Density controlled BCS-BEC crossover in 2D superconductor Yoshihiro Iwasa	**21A-SF4-03** (11:40-12:00) Signatures of Andreev scattering and anyon statistics in the $\nu = 1/3$ fractional quantum Hall regime Olivier Maillet	**21A-SF5-03** (11:40-12:00) Scalable millikelvin link for quantum microwave communication Harriet van der Vliet	**21A-SF1-03** (11:40-12:00) Experimental study of thermally driven spherically symmetric counterflow David Schmoranzer
	21A-SF3-04 (12:00-12:20) Magnetic Order in Honeycomb Layered $U_2Pt_6Ga_{15}$ Studied by Resonant X-ray Scattering Chihiro Tabata		**21A-SF4-04** (12:00-12:20) Observation of Ballistic Upstream Modes at Fractional Quantum Hall Edges of Graphene Christian Spanslatt	**21A-SF5-04** (12:00-12:20) Neutron Imaging of an Operational Dilution Refrigerator Christopher Lawson	**21A-SF1-04** (12:00-12:20) New Results and Analyses for Superfluid Liquid Crystal State in ^{4}He Monolayer Hiroshi Fukuyama
12:20	13:00 - 15:00 Public lecture (in Japanese / Online)				

color code: SF1 SF2 SF3 SF4 SF5

Day5 - Aug. 22 (Mon)

Half Plenary

	Hall 1	Hall 2
9:00	**Half-Plenary** Sponsored by RIKEN-CEMS chairs: D. Efetov, K. Kobayashi	**Half-Plenary** chairs: A. Mackenzie, D. Aoki
	22A-HPA-01 (9:00-9:40) **Superconductivity in infinite-layer nickelates** Harold Hwang	**22A-HPB-02** (9:00-9:40) **Axion insulator and helical Chern insulator phases in $MnBi_2Te_4$ antiferromagnetic topological insulator** Yayu Wang
	22A-HPA-02 (9:40-10:20) **Observation and Control of the Kondo Screening Cloud** Michihisa Yamamoto	**22A-HPB-01** (9:40-10:20) **Majorana Fermions and Pairing Symmetries in Topological Superconductors** Masatoshi Sato
10:20	10:20 - 10:50 Coffee Break	

Invited&Contributed

	Hall 1	Hall 2	Hall 3	Hall 4	Hall 5
10:50	**SF2** **UTe_2** chairs: Y. Yanase N. Butch	**SF3** **Graphene and others** Supported by ISSP chairs: W. L. Lee R. Arita	**SF4** **Nano-mechanics** chairs: A. F. Kockum W. Izumida	**SF2** **Low-Tc superconductors** chairs: K. Tanaka G. Mattoni	**SF1** **Nanoconfined systems, etc.** chairs: T. Minoguchi D. Jin
	22A-SF2A-01 (10:50-11:20) Multiple superconducting phases and field induced phenomena in novel spin-triplet superconductor UTe_2 Dai Aoki	**22A-SF3-01** (10:50-11:20) Spin triplet exciton condensations in $LaCoO_3$ at ultrahigh magnetic fields up to 600 T Akihiko Ikeda	**22A-SF4-01** (10:50-11:20) A macroscopic object passively cooled into its quantum ground state of motion Eddy Collin	**22A-SF2B-01** (10:50-11:20) Superconductivity at interfaces of $KTaO_3$ and its origin Anand Bhattacharya	**22A-SF1-01** (10:50-11:20) Realization of spin qubits with electrons on superfluid helium Denis Konstantinov
	22A-SF2A-02 (11:20-11:50) Pseudospin-Triplet Pairing in UTe_2 Daniel Agterberg	**22A-SF3-02** (11:20-11:50) Itinerant Electron Ferromagnetism in Twisted Bilayer Graphene Allan MacDonald	**22A-SF4-02** (11:20-11:50) Quantum backaction and entanglement with mechanical oscillators Mika Sillanpää	**22A-SF2B-02** (11:20-11:50) Superconductivity in quasicrystal Noriaki Sato	**22A-SF1-02** (11:20-11:50) Surface-dominated finite size effects in nanoconfined superfluid helium Emil Varga
	22A-SF2A-03 (11:50-12:10) Imaging edge fields on chiral superconductor candidate UTe_2 Yusuke Iguchi	**22A-SF3-03** (11:50-12:10) Mechanical detection of de Haas—van Alphen effect in graphene Juuso Manninen	**22A-SF4-03** (11:50-12:10) Quantum capacitance enhanced nanotube optomechanics Andreas K. Huettel	**22A-SF2B-03** (11:50-12:10) Spin-triplet topological superconductivity in electron-correlated and spin-orbital coupled systems Guo-qing Zheng	**22A-SF1-03** (11:50-12:10) Ultrasound induced parametric instability of charged superfluid He^4 forms nanometer-sized bubbles containing eight electrons Ambarish Ghosh
	22A-SF2A-04 (12:10-12:30) Quantum-geometry-induced anapole superconductivity in UTe2 Taisei Kitamura	**22A-SF3-04** (12:10-12:30) Theoretical studies of photoinduced topological phase transitions in organic salt α-$(BEDT\text{-}TTF)_2I_3$ Keisuke Kitayama	**22A-SF4-04** (12:10-12:30) Hybrid Qubit Jacob William Dunstan	**22A-SF2B-04** (12:10-12:30) Superconductivity in $CaSb_2$, line-nodal metal with a nonsymmorphic structure Atsutoshi Ikeda	**22A-SF1-04** (12:10-12:30) Spatial Diffusion of Hydrogen Atoms in Solid Molecular Hydrogen Films Vladimir Khmelenko
12:30	12:30 - 14:00 Lunch Break				
14:00	14:00 - 16:00 Poster Session				
16:00	16:00 - 16:30 Coffee Break				

Half Plenary

	Hall 1	Hall 2
16:30	**Half Plenary** chairs: S. Brown, T. Hanaguri	**Half Plenary** chairs: J. Pekola, M. Yamamoto
	22P-HPA-01 (16:30-17:10) **The superconductivty of Sr_2RuO_4** Andrew Mackenzie	**22P-HPB-01** (16:30-17:10) **Engineering qubits in silicon with atomic precision** Michelle Simmons
	22P-HPA-02 (17:10-17:50) **Correlation-driven metallic topology** Silke Paschen	**22P-HPB-02** (17:10-17:50) **Spin detection by microwave photon counting** Patrice Bertet
17:50	Poster 3 remote (21:00-23:00)	

color code: SF1 SF2 SF3 SF4 SF5

Day6 - Aug. 23 (Tue)

Hall 1

Prize

9:00 **Fritz London Memorial Prize** chairs: W. Halperin, N. Nagaosa

23A-PR-01 (9:00-9:45)
Topological Interplay of Superconductivity and Disorder
Valerii Vinokur

9:45 **23A-PR-02** (9:45-10:30)
Quantum Anomalous Hall Effect
Qi-Kun Xue

10:30 10:30 - 11:00 Coffee Break

Invited&Contributed

	Hall 1	Hall 2	Hall 3	Hall 4	Hall 5
11:00	**SF2 SYMPOSIUM: Sr_2RuO_4** chairs: C. Hicks, S. Yonezawa	**SF1 Optomechanics, nanomechanics** chairs: M. W. Meisel, S. Murakawa	**SF4 Semiconductor quantum computing** chairs: M. Simmons, R. Ito	**SF5 Low-temperature detectors** chairs: A. D'Addabbo, T. Nitta	**SF3 Exotic magnetism II** chairs: S. Paschen, S. Miyahara
	23A-SF2-01 (11:00-11:30) On the Nature of Superconductivity in Sr_2RuO_4 Stuart Brown	**23A-SF1-01** (11:00-11:30) Measurements of superfluid helium drops levitated in high vacuum Jack Harris	**23A-SF4-01** (11:00-11:30) High-fidelity quantum gates and quantum error correction with silicon spin qubits Kenta Takeda	**23A-SF5-01** (11:00-11:30) Microwave Kinetic Inductance Detectors for Astrophysics, Biophysics, and Dark Matter Detection Benjamin Mazin	**23A-SF3-01** (11:00-11:30) Charge-neutral fermions and magnetic field-driven instability in insulating $YbIr_3Si_7$ Yuki Sato
		23A-SF1-02 (11:30-11:50) Real-Time Interaction of NEMS with Quantum Vortices in Superfluid-4 Viktor Tsepelin	**23A-SF4-02** (11:30-11:50) Quantum dot Fermi-Hubbard simulator: Heisenberg spin chain and Coulomb drag Tzu-Kan Hsiao	**23A-SF5-02** (11:30-11:50) Ultrasensitive bolometer with sub-microsecond response time using graphene Josephson junction Pertti Hakonen	**23A-SF3-02** (11:30-11:50) Restriction on hidden order parameter from local symmetry at Ru site under uni-axial stress in URu_2Si_2 Shinsaku Kambe
	23A-SF2-02 (11:30-12:00) Searching for Multi-Component Superconductors with Resonant Ultrasound Spectroscopy Brad Ramshaw	**23A-SF1-03** (11:50-12:10) Topologically protected mobile solid ^{3}He on carbon nanotube Igor Todoshchenko	**23A-SF4-03** (11:50-12:10) Derivation of Single and Multiple Qubit Dynamics from Spin-Boson Model Hiroaki Matsueda	**23A-SF5-03** (11:50-12:10) Towards ultrasensitive calorimetric detection of single photons in superconducting quantum circuits Bayan Karimi	**23A-SF3-03** (11:50-12:10) Detailed magnetic phase diagram for hidden order in CeCoSi without local space inversion symmetry Shun Yanagiya
	23A-SF2-03 (12:00-12:30) Deconstructing Sr_2RuO_4: Insights from a microscopic perspective Aline Ramires	**23A-SF1-04** (12:10-12:30) Superfluid ^{3}He-B Surface States in a Confined Geometry Probed by a Microelectromechanical Oscillator Wenguang Jiang	**23A-SF4-04** (12:10-12:30) Universal quantum computation based on nanoscale skyrmion helicity qubits in frustrated magnets Motohiko Ezawa	**23A-SF5-04** (12:10-12:30) Metallic magnetic calorimeters: Novel detectors for high-resolution X-ray spectroscopy Daniel Hengstler	**23A-SF3-04** (12:10-12:30) NMR study of α-Mn exhibiting anomalous Hall effect under high pressure Hideto Fukazawa

12:30 12:30 - 14:00 Lunch Break

14:00 14:00 - 16:00 Poster Session

16:00 16:00 - 16:30 Coffee Break

color code: SF1 SF2 SF3 SF4 SF5

Day6 - Aug. 23 (Tue)

	Hall 1	Hall 2	Hall 3	Hall 4	Hall 5
16:30	**SF1 SYMPOSIUM: Topological superfluid ^{3}He** chairs: Y. Sasaki A. Vorontsov	**SF2 Fe-based superconductors** chairs: H. Suderow H. Ding	**SF4 Quantum transport I** chairs: C. Bauerle A. Anthore	**SF5 Thermometry** chairs: H. Ikegami C. Enss	**SF3 Correlation and topology** chairs: F. Ronning T. Asaba
Invited&Contributed	**23P-SF1A-01 (16:30-17:00)** Flow in the nodal-line superfluid in confined ^{3}He Vladimir Eltsov	**23P-SF2A-01 (16:30-17:00)** Possible Majorana Zero Mode in the Vortex Cores of Fe(Se, Te) Tetsuo Hanaguri	**23P-SF4A-01 (16:30-17:00)** Real-time detection of two-electron tunneling processes in a Cooper pair splitter Antti Ranni	**23P-SF5-01 (16:30-17:00)** Switching thermometry for dynamical investigations of thermal processes at nanoscale Maciej Zgirski	**23P-SF3A-01 (16:30-17:00)** Topological phases in correlated systems from first principles Roser Valenti
	23P-SF1A-02 (17:00-17:30) Superfluid ^{3}He in Nematic Aerogel in High Magnetic Field Vladimir Dmitriev	**23P-SF2A-02 (17:00-17:20)** Quadrupolar charge dynamics in the nonmagnetic $FeSe_{1-x}S_x$ superconductors Weilu Zhang	**23P-SF4A-02 (17:00-17:20)** Excitonic nature of magnons in a quantum Hall ferromagnet Preden Roulleau	**23P-SF5-02 (17:00-17:20)** Liquid ^{3}He based thermometers for calorimetric measurements of small solid samples at ultra-low temperatures and high magnetic fields. Lucia Steinke	**23P-SF3A-02 (17:00-17:20)** Weyl-orbit quantum oscillation in untwinned thin films of ferromagnetic Weyl semimetal $SrRuO_3$ Wei-Li Lee
	23P-SF1A-03 (17:30-18:00) Pair Density Waves in Confined Superfluid ^{3}He Takeshi Mizushima	**23P-SF2A-03 (17:20-17:40)** Unique interplay between local moments and vortices in the high-T_c magnetic superconductor $EuRbFe_4As_4$ Shigeyuki Ishida	**23P-SF4A-03 (17:20-17:40)** Exciton condensation and valley splitting in Si/SiGe bilayers Dominique Laroche	**23P-SF5-03 (17:20-17:40)** Comparison of different Johnson noise thermometers from millikelvin down to microkelvin temperatures Alexander Kirste	**23P-SF3A-03 (17:20-17:40)** Investigation of spin-orbital dynamics on the non-Kramers pyrochlore lattice Nan Tang
		23P-SF2A-04 (17:40-18:00) Order Parameter Fluctuations and Thermodynamics in the 2D t-J Model William Putikka	**23P-SF4A-04 (17:40-18:00)** Collision integral and generalized Ward identity for nonlinear Kondo effect in the low-energy Fermi-liquid regime Akira Oguri	**23P-SF5-04 (17:40-18:00)** Development of Magnetic-Field-Insensitive Thermometer and Its Applications Used in Pulsed-Magnetic Field Atsushi Miyake	**23P-SF3A-04 (17:40-18:00)** Electric current control of spin helicity and memory effect in an itinerant helimagnet Nan Jiang
18:00	18:00 - 18:30 Coffee Break				
18:30	**SF3 SYMPOSIUM: Quantum spin liquid** chairs: Y. Motome T. K. Ng	**SF2 Cuprates and nickelates** chairs: Y. Iguchi H. Kontani	**SF4 Quantum transport II** chairs: C. Strunk A. Oguri	**SF2 Topological superconductors** chairs: T. Machida S. Kobayashi	**SF1 Phase transitions** chairs: J. Taniguchi R. Nomura
Invited&Contributed	**23P-SF3B-01 (18:30-19:00)** Disorder in the Kitaev spin liquid Natalia Perkins	**23P-SF2B-01 (18:30-19:00)** New findings in pressurized superconducting cuprate and non-superconducting heavy fermion compound Liling Sun	**23P-SF4B-01 (18:30-19:00)** Transmission of quantum state of electrons across a metallic island with Coulomb interaction Anne Anthore	**23P-SF2C-01 (18:30-19:00)** Spin and Coulomb interaction effects on Andreev states in hybrid weak links Cristián Urbina	**23P-SF1B-01 (18:30-19:00)** 4D XY Quantum Criticality in ^{4}He Confined in Nanoporous Media Keiya Shirahama
	23P-SF3B-02 (19:00-19:30) Magnetothermal Transport in the Field-induced Quantum Spin Liquid State of a Honeycomb J_{eff} =1/2 Magnet Hidenori Takagi	**23P-SF2B-02 (19:00-19:30)** Compartmentalizing the cuprate strange metal Nigel Hussey	**23P-SF4B-02 (19:00-19:20)** Phase interference for probing topological fractional charge in a TI-based Josephson junction array Daan Wielens	**23P-SF2C-02 (19:00-19:20)** Superconducting single-photon detectors and qubits based on two-dimensional materials Kin Chung Fong	**23P-SF1B-02 (19:00-19:20)** Cosmology and the AB transition in superfluid ^{3}He Mark Hindmarsh
			23P-SF4B-03 (19:20-19:40) A hallmark of disordered reconstructed-edge transport at a fractional-integer quantum Hall junction Masayuki Hashisaka	**23P-SF2C-03 (19:20-19:40)** 1D Majorana Goldstinos and partial supersymmetry breaking in quantum wires Pasquale Marra	**23P-SF1B-03 (19:20-19:40)** NMR evidence for density wave order in the two dimensional ^{4}He supersolid doped by ^{3}He Jan Nyeki
	23P-SF3B-03 (19:30-20:00) Thermal Hall conductivity κ_{xy} and κ_{xx} in the Kitaev magnet α-$RuCl_3$ Phuan Ong	**23P-SF2B-03 (19:30-19:50)** Superconductivity in La-based infinite-layer nickelates Motoki Osada	**23P-SF4B-04 (19:40-20:00)** Universal Hydrodynamic Flow in a Two-Dimensional Electron Fluid Alex Hamilton	**23P-SF2C-04 (19:40-20:00)** Self-consistent study of non-Abelian topological superconductivity in quasicrystals Kaori Tanaka	**23P-SF1B-04 (19:40-20:00)** Disorder Induced Anomalous Thermal Hall Effect in Chiral Phases of Superfluid ^{3}He Priya Sharma
20:10		**23P-SF2B-04 (19:50-20:10)** Calculation of the Phase Diagram of Nickelate Superconductors Motoharu Kitatani			
	Poster 4 remote (21:00-23:00)				

color code: SF1 SF2 SF3 SF4 SF5

Day7 - Aug. 24 (Wed)

Hall 1

	Prize	**2020 IUPAP Young Scientist Prize in Low Temperature Physics and 2022 Early Carrer Scientist Prize in Low Temperature Physics** chairs: R. Haley, M. Tsubota
9:00		**Award Ceremony** presenter: N. Nagaosa
9:10		**24A-PR-01 (9:10-9:40) 2020 IUPAP Young Scientist Prize** **Pushing the boundaries of quantum vacuum in superfluid ^{3}He** **Samuli Autti**
		24A-PR-02 (9:40-10:10) 2020 IUPAP Young Scientist Prize **Charge Confinement and Manipulation in van der Waals Nanostructures** **Ke Wang**
		24A-PR-03 (10:10-10:40) 2022 IUPAP Early Carrer Scientist Prize **Quantum materials under the nonlinear electromagnetic spotlight** **Qiong Ma**
10:40		10:40 - 11:10 Coffee Break
11:10	Prize	**24A-PR-04 (11:10-11:40) 2022 IUPAP Early Carrer Scientist Prize** **Visualization of Electron-Pair Fluids and Crystals at the Atomic Scale** **Xiaolong Liu**
		24A-PR-05 (11:40-12:10) 2022 IUPAP Early Carrer Scientist Prize **Correlated and topological states in moiré graphene multilayers** **Matthew Yankowitz**
		24A-PR-06 (12:10-12:40) 2022 IUPAP Early Carrer Scientist Prize **Iron pnictides feeling the strain** **Matthias Saneyuki Ikeda**
12:40		12:40 - 14:00 Lunch Break
14:00	Plenary	**Plenary** Sponsored by JST-CREST chairs: J. Saunders, M. Takigawa
		24P-P1-01 (14:00-14:45) Supported by JST-CREST **Error correction of a logical quantum bit beyond the break-even point** **Michel H. Devoret**
		24P-P1-02 (14:45-15:30) **Topological properties of Kitaev quantum spin liquid candidate α-$RuCl_3$** **Yuji Matsuda**
15:30		15:30 - 16:00 Coffee Break
16:00	Plenary	**Plenary** chairs: S. Paschen, K. Kobayashi
		24P-P2-01 (16:00-16:45) **“Super” neuromorphic computing with low temperature devices** **Sae Woo Nam**
17:30		**24P-P2-02 (16:45-17:30)** **Quantum magnonics: manipulating and detecting single quanta of collective spin excitations in a ferromagnetic crystal** **Yasunobu Nakamura**
18:00		**Closing(30)**