

ISSP International Workshop

Quantum Transport Frontiers of Mesoscopic Physics

Monday, 20 October 2025**Chair: Masayuki Hashisaka (ISSP)**

9:20 am – 9:40 am Opening: ISSP director Zenji Hiroi, Workshop chair Masayuki Hashisaka

9:40 am – 10:30 am Ady Stern
"Flux attachment and novel fractionalized phases"

10:30 am – 11:00 am Coffee break

Chair: Toshiya Ideue (ISSP)11:00 am – 11:30 am Heung-Sun Sim
"Time-domain braiding of anyons in (B)CFT"11:30 am – 12:00 am Yuval Ronen
"Interference in the Even-Denominator Quantum Hall Regime"12:00 pm – 12:20 pm Shintaro Takada
"Eigenstate control of plasmon wavepackets with electron-channel blockade"

12:20 pm – 12:25 pm Photo session

12:25 pm – 2:00 pm Lunch break

Chair: Kohtaro Kato (Nagoya University)2:00 pm – 2:30 pm Naoto Nagaosa
"Nonreciprocal transport in superconductors"2:30 pm – 3:00 pm Masaki Oshikawa
"Quantum transport under decoherence"3:00 pm – 3:20 pm Ryutaro Yoshimi
"Quantum Hall effect in ferroelectric topological insulator (Sn,Pb,In)Te thin films"

3:20 pm – 3:50 pm Coffee break

Chair: Toshimasa Fujisawa (Science Tokyo)3:50 pm – 4:20 pm Le Duc Anh
"New quantum transport phenomena in Fe-doped ferromagnetic semiconductor heterostructures"

4:20 pm – 4:50 pm	Shuichi Iwakiri "Gate defined quantum interferometer in twisted bilayer graphene"
4:50 pm – 5:20 pm	Miuko Tanaka "Kinetic inductance of a van der Waals superconductor"

Tuesday, 21 October 2025

Chair: Katsumasa Yoshioka (NTT BRL)

9:10 am – 9:40 am	Norio Kumada " Ultrafast carrier dynamics in wdW materials"
9:40 am – 10:30 am	Jerome Faist "Manipulating correlations in quantum Hall states with vacuum fluctuations in cavities"
10:30 am – 11:00 am	Coffee break

Chair: Shuichi Iwakiri (NIMS)

11:00 am – 11:30 am	Frederic Pierre "Experimental evidence for a fractional entropy in the two- and three-channel Kondo states"
11:30 am – 12:00 pm	Tim Kikkeler "Noise in unconventional superconductor hybrid junctions"
12:00 pm – 12:20 pm	Torsten Roeper "GHz Transport and Breakdown in a Quantum Anomalous Hall Insulator"
12:20 pm – 2:00 pm	Lunch break

Chair: Yukio Tanaka (Nagoya University)

2:00 pm – 2:30 pm	Pok Man Tam "A Tale of Two Topologies — Quantized Transport of Superconducting Topological Electronics"
2:30 pm – 3:00 pm	Hiromi Ebisu "Modulated symmetries in anomalous spin systems"
3:00 pm – 3:20 pm	Koji Kudo "Many-body topological superconductivity in a half-filled Landau Level–superconductor hybrid system"
3:20 pm – 3:50 pm	Coffee break

3:50 pm – 5:20 pm	Poster session
5:20 pm – 6:00 pm	Transfer
6:00 pm –	Workshop dinner

Wednesday, 22 October 2025

Chair: [Katsumasa Yoshioka \(NTT BRL\)](#)

9:10 am – 9:40 am	Kazuyuki Kuroyama "Electrical readout and control of ultrastrong terahertz light-matter coupling in semiconductor electron systems"
9:40 am – 10:00 am	Ryusuke Matsunaga "Terahertz spectroscopy for transport in semiconductors related with spin, valley, and orbital degrees of freedom"
10:00 am – 10:30 am	Yasuhiro Niimi "Observation of the crossover from quantum fluxoid to half-quantum fluxoid in a chiral superconducting device"
10:30 am – 11:00 am	Coffee break

Chair: [Takeo Kato \(ISSP\)](#)

11:00 am – 11:30 am	Jerome Rech "Time-domain braiding of anyons revealed by Hong-Ou-Mandel interferometry"
11:30 am – 12:00 pm	Cohen Liam "Quasiparticle Dynamics in the Fractional Quantum Hall Regime"
12:00 pm – 12:20 pm	Noah Samuelson "Quantum Hall Interferometry in Bilayer Graphene"
12:20 pm – 2:00 pm	Lunch break

Chair: [Toshimasa Fujisawa \(Science Tokyo\)](#)

2:00 pm – 2:30 pm	Koji Muraki "Transport in electrostatically defined helical edge states"
2:30 pm – 3:00 pm	Christopher Bauerle "Basic science & quantum technology using flying electrons"
3:00 pm – 3:20 pm	Thomas Vasselon "Dynamics of ultrashort electronic wavepackets"

3:20 pm – 3:50 pm Coffee break

Chair: Masayuki Hashisaka (ISSP)

3:50 pm – 4:40 pm Erez Berg
"Strong electronic correlation in twisted bilayer graphene"

4:40 pm – Closing Masayuki Hashisaka