

| Time | 2023.10.10 | | Time | 2023.10.11 | | 2023.10.12 | | 2023.10.13 | |
|-------------------|---|---|--|---|--|---|--|--|---|
| | Tuesday | | | Wednesday | | Thursday | | Friday | |
| 9:00~9:45 | Registration & Coffee Break | | 9:00~9:30 | Registration & Coffee Break | | | | | |
| 9:45~10:00 (15') | Opening Session 1. Noh Do Young, IBS president 2. Sessoli Roberta, University of Florence 3. Chong Yonuk, SKKU | | 9:30~10:10 (40') | Coherence enhancement of solid-state qubits by scanning probe microscopy (Ying Jiang) | Session 3 Quantum control in molecular qubits Chair: Lukas Spree | Chirality as a new tool for addressing molecular spin qubits (Roberta Sessoli) | Session 5 Quantum limits of mechanical motion Chair: Massine Kelai | Spin-coupled optomechanical systems in diamond (Ania Jayich) | |
| 10:00~10:30 (30') | Tutorial Talk Chair: Michelle Randall | Quantum-coherent Nanoscience (Andreas Heinrich) | 10:10~10:30 (20') | Autonomous coherence protection of a two-level system in a fluctuating environment (Isaac Fernando Quijandria Diaz) | | Reversible spin-optical interface in luminescent organic radicals (Sebastian Gorgon) | | Quantum Acoustics: surface acoustic waves-assisted single-photon emissions (Seok-Kyun Son) | |
| | | | 10:30~11:00 | Coffee Break | | Coffee Break | | Coffee Break | |
| 10:30~11:30 (60') | | | Introduction to semiconductor spin qubits (Andrea Morello) | 11:00~11:40 (40') | | Encoding quantum information in high-spin nuclei (Andrea Morello) | | Coherent Effects in Porphyrin-Based Molecular Wires and Nanorings (Harry Anderson) | Mechanical oscillators toward quantum sensing (Junho Suh) |
| | | | | 11:40~12:00 (20') | | Coherent quantum state manipulation and error corrections on an electron-nuclear spin qubit system (Sumin Lim) | | Hyperfine interactions in open-shell planar carbon nanostructures (Sanghita Sengupta) | Non-Linear Nanomechanical Dynamics Induced by Single-electron Tunneling (Kushagra Aggarwal) |
| 11:30~12:00 (30') | | Quantum-coherent Science in Korea (Yonuk Chong) | 12:00~12:20 (20') | Universal nuclear two-qubit logic operation in an exchange-coupled donor system (Holly Stemp) | | Controlling Quantum Spin Dynamics in Nanoscale Molecular Qubits (Stephen Hill) | | Toward hybrid quantum systems based on solid-state spin qubits (Dongkwon Lee) | |
| 12:00~13:30 (90') | Lunch & Coffee break | | 12:20~13:50 (90') | Lunch & Coffee break | | | | | |
| 13:30~14:30 (60') | Tutorial Talk Chair: Michelle Randall | Entanglement of surface spins – a theory perspective (Christoph Wolf) | 13:50~14:30 (40') | A low-noise quantum dot in an open microcavity (Mark Hogg) | Session 4 Quantum surface science Chair: Valeria Sheina | Coherent control of spins on surfaces using scanning tunneling microscopy (Yujeong Bae) | Session 6 Spin qubits in quantum dots Chair: Corina Urdaniz | Correction of phase errors in Si spin qubits (Seigo Tarucha) | |
| | | | | 14:30~14:50 (20') | | Efficient single photon emitting from a quantum dot in a double solid immersion lens structure (Donghan Lee) | | Building highly entangled spin states with Carbon (Elia Turco) | Coherence of a singlet-triplet qubit driven by magnetic field gradient in isotopically purified silicon (Dohun Kim) |
| 14:30~14:50 | Group Photo 1 | | 14:50~15:20 | Coffee Break | | Coffee Break | | Coffee Break | Coffee Break |
| 14:50~15:30 | Move to QNS | | 15:20~16:00 (40') | Single molecules in slow motion videography (Rupert Huber) | | Single-molecule electron-spin resonance with atomic force microscopy (Lisanne Sellies) | | Designing and probing high-fidelity spin qubits and their environment (Guido Burkard) | |
| 15:30~17:00 (90') | QNS Building Tour with Coffee Break | | 16:00~16:20 (20') | A photonic which-path entangler based on longitudinal cavity-qubit coupling (Zoé McIntyre) | Lanthanide Atoms on Surfaces: From Single Atom Magnets to Spin Qubit Candidates (Fabio Donati) | Identifying Pauli Spin Blockade using Deep Learning (Jonas Schuff) | | | |
| | | | 16:20~16:40 (20') | Towards single quantum emission in 2D semiconductors captured at the single-defect level by scanning tunnelling luminescence (Bent Weber) | Probing the dynamics of individual spins coupled to a superconductor using stochastic resonance (Nicolaj Betz) | Charge-sensing of a Ge/Si core/shell nanowire double quantum dot using a high-impedance superconducting resonator (Pierre Chevalier Kwon) | | | |
| 17:00~18:30 (90') | Poster Session 1 with light meal | | 16:40~17:20 | Move to QNS | | Excursion (200') | | Closing Session/ Group Photo 2 | |
| | | | 17:20~18:50 (90') | Poster Session 2 with light meal | | | | | |
| 18:30~19:30 (60') | Women in Science: Panel Discussion | | 18:50~20:00 | | | | | | |