

CONFERENCE PROGRAMME

MONDAY-16 APRIL / SEASIDE HOUSE

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14:00 –	<b>Arrival and Registration</b>
19:00 – 21:00	<b>Dinner</b>

TUESDAY-17 APRIL / SEASIDE HOUSE

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07:00 – 08:45	<b>Breakfast</b>
08:45 – 09:00	<b>Opening</b>
09:00 – 09:45	Jason Twamley <i>"Quantum engineering using magnetic fields: Quantum Magnetomechanics"</i>
09:45 – 10:15	Deshui Yu <i>"Quantum Hybridization between Superconducting Circuits and Atoms"</i>
10:15 – 10:45	Rashi Sachdeva <i>"Bose Hubbard model in artificial magnetic fields"</i>
10:45 – 11:15	<b>Coffee Break</b>
11:15 – 12:30	<b>Poster Preview</b>
12:30 – 14:00	<b>Lunch</b>
14:00 – 14:45	Nobuyuki Imoto <i>"Optical fiber-based quantum communication"</i>
14:45 – 16:15	<b>Poster Preview</b>
16:15 – 17:00	<b>Tea Break</b>
17:00 – 19:00	<b>Poster Session 1</b>
19:00 – 21:00	<b>Dinner</b>

WEDNESDAY-18 APRIL/ OIST CAMPUS (LECTURES@B250)

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07:00 – 08:15	<b>Breakfast</b>
	<b>(8:30 Transfer to OIST Campus)</b>
09:00 – 09:45	<b>Eva-Maria Graefe</b> <i>"Semiclassical wave packet dynamics in quantum systems with loss and gain"</i>
09:45 – 10:30	<b>Artur Widera</b> <i>"Spin dynamics of individual neutral impurities in a Bose-Einstein condensate"</i>
10:30 – 11:15	<b>Coffee Break, OIST Campus Tour</b>
11:15 – 12:00	<b>Harald Weinfurter</b> <i>"Event-ready loophole free Bell tests - From Foundations to Applications"</i>
12:00 – 12:15	<b>Conference Photo</b>
12:15 –	<b>Excursion</b>
19:00 – 21:00	<b>Dinner at a Restaurant "Uraniwa"</b>

THURSDAY-19 APRIL/ SEASIDE HOUSE

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07:00 – 09:00	<b>Breakfast</b>
09:00 – 09:45	<b>John Morton</b> <i>"Engineering the quantum spin dynamics of donors in silicon"</i>
09:45 – 10:15	<b>Yusuke Hama</b> <i>"Negative-Temperature State Relaxation and Reservoir-Assisted Quantum Entanglement in Double Spin Domain Systems"</i>
10:15 – 10:45	<b>Xi Chen</b> <i>"Fast and robust manipulation of BEC by using shortcuts to adiabaticity"</i>
10:45 – 11:15	<b>Coffee Break</b>
11:15 – 12:00	<b>Hideo Kosaka</b> <i>"Holographic quantum control of hybrid spin qubits in an NV center in diamond"</i>
12:00 – 12:30	<b>Dorian Gangloff</b> <i>"Improving a solid-state qubit through an engineered mesoscopic environment"</i>
12:30 – 14:00	<b>Lunch</b>
14:00 – 14:45	<b>Meera Parish</b> <i>"Dynamics of impurities in quantum gases"</i>
14:45 – 15:15	<b>Mikio Nakahara</b> <i>"Creation of knots in Bose-Einstein condensates by counterdiabatic quantum control"</i>
15:15 – 15:45	<b>Diego Wisniacki</b> <i>"Quantum Optimal Control: Landscape topology and minimum control time"</i>
15:45 – 16:30	<b>Tea Break</b>
16:30 – 17:15	<b>Zhen-Sheng Yuan</b> <i>"Atomic Spin Entanglement and Anyonic Fractional Statistics in an Optical Lattice"</i>
17:15 – 19:00	<b>Poster Session 2</b>
19:00 – 21:00	<b>Dinner</b>

FRIDAY-20 APRIL/ SEASIDE HOUSE

07:00 – 09:00	<b>Breakfast</b>
09:00 – 09:45	<b>Renate Landig</b> <i>"Time crystals in strongly interacting dipolar spin systems"</i>
09:45 – 10:15	<b>Giulia De Rosi</b> <i>"Collective oscillations of trapped atomic gases in low dimensions"</i>
10:15 – 10:45	<b>Juan Polo Gomez</b> <i>"Damping of Josephson oscillations in strongly correlated one-dimensional atomic gases"</i>
10:45 – 11:15	<b>Coffee Break</b>
11:15 – 12:00	<b>Ying-Dan Wang</b> <i>"Optimized STIRAP-type State Transfer in Solid-State Quantum Devices"</i>
12:00 – 12:30	<b>Tomas Ramos</b> <i>"New Spectroscopic Methods in Quantum Photonics: Accessing Multiphoton Processes and Correlated Noise"</i>
12:30 – 14:00	<b>Lunch</b>
14:00 – 14:45	<b>Marcello D'Alamonte</b> <i>"Entanglement field theories - a new approach to experimentally measure and theoretically understand entanglement in many-body systems"</i>
14:45 – 15:15	<b>Joanna Zielinska</b> <i>"Atom-resonant squeezed light from a tunable doubly-resonant monolithic ppRKTP parametric amplifier"</i>
15:15 – 15:45	<b>Johannes Borregaard</b> <i>"Nonlocal Interferometry with Quantum Networks"</i>
15:45 – 16:30	<b>Tea Break</b>
16:30 – 17:15	<b>Christopher Fuchs</b> <i>"The Search for a QBist Formulation of Quantum Control"</i>
17:15 – 19:00	<b>Free Time</b>
19:00 -	<b>BBQ Dinner</b>

SATURDAY-21APRIL / SEASIDE HOUSE

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07:00 – 09:00	<b>Breakfast</b>
	<b>Departure (Lab Tours)</b>