

# Conference Program

December 1, 2024

Time	Activities
08:00-08:45	Registration
08:45-09:15	Opening Ceremony
09:15-10:00	Keynote Quantum Computing with Neutral Atoms Ivan Deutsch
10:00-10:30	QTRic Quantum Simulation and Sensing with Neutral Rydberg Atoms Nithiwadee Thaicharoen
10:30-10:50	Coffee Break
10:50-11:20	ASEAN Building and Controlling a Superconducting Quantum Computer Yung Szen Yap
11:20-11:50	ASEAN Designing Hybrid Quantum Computing Pipelines with NVIDIA CUDA-Q Dylan Josh Lopez
11:50-12:50	Lunch
12:50-14:10	Poster Presentation
14:10-14:40	Afternoon Discussion
14:40-15:10	ASEAN Holomorphic Quantization of Qubit Geometry Hishamuddin Zainuddin
15:10-15:40	Invited Energetic Advantages for Quantum Agents Jayne Thompson
15:40-16:00	Coffee Break
16:00-16:30	QTRic Quantum Machine Learning and the Journey to its Scalability Supanut Thanasilp
16:30-17:00	QTFT A Category Theory and Quantum Optimization Framework for Tackling Dynamic Business Challenges in Thailand Gun Pinyo and Panithi Suwanno
17:00-17:15	Break
17:15-20:15	Welcome Reception

# Conference Program

December 2, 2024

Time	Activities
09:00-09:45	<b>Keynote</b> Quantum Agents and Non-Markovianity: How do identify them and what can they do? Mile Gu
09:45-10:15	<b>Invited</b> Time-Like Correlations and Retrodiction in Quantum Theory Francesco Buscemi
10:15-10:45	<b>Invited</b> Bandits Roaming in Hilbert Space Marco Tomamichel
10:45-11:05	<b>Coffee Break</b>
11:05-11:35	<b>Invited</b> Quantum Sensing: From Laboratory Innovation to Practical Precision Rainer H. Dumke
11:35-12:05	<b>ASEAN</b> Molecular Spectroscopy with Scattershot Boson Sampler Leong Chuan Kwek
12:05-13:05	<b>Lunch</b>
13:05-14:25	<b>Poster Presentation</b>
14:25-14:55	<b>Afternoon Discussion</b>
14:55-15:40	<b>Keynote</b> Can Precision Spectroscopy be performed in Ion Coulomb Crystals?- About Tests of Fundamental Physics and Multi-Ion Clocks Tanja E. Mehlstäubler
15:40-16:10	<b>QTRic</b> How Optical Clocks Will Transform Thailand Standard Time? Piyaphat Phoonthong
16:10-16:30	<b>Coffee Break</b>
16:30-17:00	<b>Invited</b> Nitrogen Vacancy Centres, a Versatile Testbed for Quantum Sensing and Simulations Soham Pal
17:00-17:30	<b>Contributing</b> Electron Spin Gates in a Scalable Diamond Quantum Register Timo Joas
17:30-18:00	<b>Break</b>
18:00-21:00	<b>Conference dinner (and relaxing time afterward)</b>

# Conference Program

December 3, 2024

Time	Activities
09:00-09:45	<b>Keynote</b> Quantum non-Gaussian Light and Mechanics Radim Filip
09:45-10:15	<b>Invited</b> Super Lasers: Can we achieve the Heisenberg limit for laser coherence? Howard M. Wiseman
10:15-10:45	<b>Invited</b> Quantum-optimal Parameter Estimation in Optics and the Example of Source Separation Nicolas Treps
10:45-11:00	<b>Coffee Break</b>
11:00-11:30	<b>Invited</b> Optimal Control and Continuously Measured Quantum Systems Andrew N. Jordan
11:30-12:00	<b>Invited</b> Agnostic Phase Estimation David Arvidsson-Shukur
12:00-12:30	<b>QTRic</b> Enhancing Optoelectronic Properties through Quantum Dot Integration: Interface Engineering and 2D Materials for Semiconductor-based Devices Sukrit Sucharitakul
12:30-13:30	<b>Lunch</b>
13:30	<b>Freestyle Excursion</b>

# Conference Program

December 4, 2024

Time	Activities
09:00-09:45	<b>Keynote</b> Networks for Modular Quantum Systems Rodney Van Meter
09:45-10:15	<b>Invited</b> Quantum Optics with Complex Media Sylvain Gigan
10:15-10:35	<b>Coffee Break</b>
10:35-11:20	<b>Keynote</b> Advances in Photonic Quantum Computing Anthony Laing and Emilien Lavie
11:20-11:50	<b>Contributing</b> Synchronizable Hybrid Subsystem Codes Theerapat Tansuwannont
11:50-12:20	<b>QTRic</b> Quantum Communication in Thailand Poompong Chaiwongkhot
12:20-13:30	<b>Lunch and Closing Remarks</b>
13:30	<b>Departure</b>