

	Monday 29 October	Tuesday 30 October	Wednesday 31 October
09:00 – 09:15	Registration / Coffee	Peter Hänggi Coherent absolute negative mobility of a Bose-Einstein condensate in an ac-driven optical lattice	Nobuyuki Takei Ultrafast coherent control of an ultracold Rydberg gas
09:15 – 09:30	Opening		
09:30 – 09:40			Discussion
09:40 – 10:10	Bernard Barbara Quantum spin-dynamics and decoherence examined in terms of the classical Landau-Zener model	Naoki Kawashima Superfluidity and supersolidity of lattice models	Irinel Chiorescu Coherent dynamics of spins placed in quantized electromagnetic fields and studied using superconducting devices
10:10 – 10:20	Discussion	Discussion	Discussion
10:20 – 10:50	Hans De Raedt Simulation of a neutron experiment confirming Ozawa's universally valid-error disturbance relation	Stefan Wessel Adiabatic loading of SU(N) alkaline earth fermions in optical lattices	Seigo Tarucha Non-local spin entanglement with quantum dots
10:50 – 11:00	Discussion	Discussion	Discussion
11:00 – 11:20	Coffee Break / Posters	Coffee Break / Posters	Coffee Break / Posters
11:20 – 11:50	Kristel Michielsen Event-by-event simulation of entanglement in neutron interferometry experiments	Norio Kawakami Edge modes in one-dimensional topological insulators and superconductors	Mio Murao Universal construction of controlled-unitary gate for unknown Hamiltonian dynamics
11:50 – 12:00	Discussion	Discussion	Discussion
12:00 – 12:30	Naomichi Hatano Zero eigenvalues of quantum walks on complex networks	Alejandro Muramatsu Charge and spin fractionalization beyond the Luttinger liquid paradigm	Mohammad Amin Evidence of entanglement in a quantum annealing processor
12:30 – 14:00	Lunch	Lunch	Lunch
14:00 – 14:30	Peter Reimann Equilibration of isolated macroscopic quantum systems	Seiji Miyashita Quantum dynamics of independent spin system with cavity photons	Simon Trebst Topological quantum matter and quantum computing
14:30 – 14:40	Discussion	Discussion	Discussion
14:40 – 15:10	Fengping Jin Equilibration and thermalization of classical systems	Mark Novotny An efficient algorithm for simulating the real-time quantum dynamics of spin systems coupled to certain types of quantum baths	Thomas Neuhaus On the map from 3SAT to maximum independent set and its consequences for the efficiency of quantum adiabatic computations
15:10 – 15:20	Discussion	Discussion	Closing
15:20 – 15:40	Coffee Break / Posters	Coffee Break / Posters	
15:40 – 16:10	Jochen Gemmer Emergence of Fokker-Planck dynamics within a closed finite spin system	Kenji Harada Numerical study of quantum frustrated magnets using entanglement renormalization	
16:10 – 16:20	Discussion	Discussion	
16:20 – 16:50	Chikako Uchiyama Non-Markovian effect on quantum transport	Philippe Corboz Simulation of strongly correlated systems in two dimensions with infinite projected entangled pairs (iPEPS)	
16:50 – 17:00	Discussion	Discussion	
17:00 – 17:30	Group photo	Synge Todo Quantum Monte Carlo level spectroscopy	
	Reception	Dinner	