	Monday 17 October	Tuesday 18 October	Wednesday 19 October
09:00 – 09:30	Registration / Coffee	**Naoki Kawashima** Quantum Monte Carlo simulation on SU(N) Heisenberg model	**Kenji Ohmori** Single molecule can calculate 1000 times faster than supercomputers
09:30 – 09:40		Discussion	Discussion
09:40 – 10:10		**Peter Young** Quantum adiabatic algorithms	**Heinz-Peter Breuer** Quantification and control of non-Markovianity in open quantum systems
10:10 – 10:20	Opening	Discussion	Discussion
10:20 – 10:50	**David DiVincenzo** Small quantum circuits that are key to quantum computation	**Alexander Hartmann** Phase transitions and clustering properties of optimization problems	**Fengping Jin** Dynamics of nano-scale magnets
10:50 – 11:00	Discussion	Discussion	Discussion
11:00 – 11:20	Coffee Break / Posters	Coffee Break / Posters	Coffee Break / Posters
11:20 – 11:50	**Seigo Tarucha** Spin qubits and qubit gates with quantum dots	**Theo Nieuwenhuizen** Dynamics in a model for quantum measurements and insight in the quantum measurement problem	**Chikako Uchiyama** Effect of initial correlation on linear response
11:50 – 12:00	Discussion	Discussion	Discussion
12:00 – 12:30	**Thomas Neuhaus** Numerical study of quantum adiabatic computations for the case of hardest 2SAT and 3SAT realizations	**Tatsuhiko Shirai** Cooperative phenomena of paramagnetic systems in a cavity driven by an AC external field	**Naomichi Hatano** Complex eigenvalue problem of the Liouvillian of a quantum dot system
12:30 – 14:00	Lunch	Lunch	Lunch
14:00 – 14:30	**Kazue Kudo** Coherent control of quantum dynamics by periodic driving	**Synge Todo** Topological order parameter in low dimensional magnets: QMC measurement of local quantized Berry phase	**Akinori Nishino** Exact many-electron scattering states in a parallel-coupled double quantum dot system
14:30 – 14:40	Discussion	Discussion	Discussion
14:40 – 15:10	**Susana Huelga** Coherence and decoherence in complex networks: Principles of noise assisted transport and the origin of long-lived coherences in photosynthetic complexes	**Martin Plenio** System-environment interaction in the non-perturbative regime	**Hans De Raedt** Analysis and simulation of Einstein-Podolsky-Rosen-Bohm experiments
15:10 – 15:20	Discussion	Discussion	Closing
15:20 – 15:40	Coffee Break / Posters	Coffee Break / Posters	
15:40 – 16:10	**Norio Kawakami** Time-evolution of quantum particles in one dimension	**Mio Murao** Simulating typical entanglement with many-body Hamiltonian dynamics	
16:10 – 16:20	Discussion	Discussion	
16:20 – 16:50	**Kristel Michielsen** A two-beam single-photon experiment for testing the applicability of quantum theory to event-based processes	**Bernard Barbara** Quantum magnetism of large spin: From relaxation to coherence	
16:50 – 17:00	Discussion	Discussion	
	Group photo	Dinner	
	Reception		