	Monday 17 October	Tuesday 18 October	Wednesday 19 October	
	Registration / Coffee	Naoki Kawashima	Kenji Ohmori	
09:00 - 09:30		Quantum Monte Carlo simulation	Single molecule can calculate 1000	
		on SU(N) Heisenberg model	times faster than supercomputers	
09:30 - 09:40		Discussion	Discussion	
		Peter Young	Heinz-Peter Breuer	
09:40 - 10:10		Quantum adiabatic algorithms	Quantification and control of non- Markovianity in open quantum	
			systems	
10:10 - 10:20	Opening	Discussion	Discussion	
	David DiVincenzo	Alexander Hartmann	Fengping Jin	
10:20 - 10:50	Small quantum circuits that are key	Phase transitions and clustering	Dynamics of nano-scale magnets	
10.20 10.30	to quantum computation	properties of optimization		
10.50 11.00	Disquesion	problems	Discussion	
10:50 - 11:00 11:00 - 11:20	Discussion Coffee Break / Posters	Discussion Coffee Break / Posters	Coffee Break / Posters	
11.00 - 11.20	Seigo Tarucha	Theo Nieuwenhuizen	Chikako Uchiyama	
	Spin qubits and qubit gates with	Dynamics in a model for quantum	Effect of initial correlation on linear	
11:20 – 11:50	quantum dots	measurements and insight in the	response	
		quantum measurement problem		
11:50 - 12:00	Discussion	Discussion	Discussion	
	Thomas Neuhaus	Tatsuhiko Shirai	Naomichi Hatano	
12:00 - 12:30	Numerical study of quantum	Cooperative phenomena of	Complex eigenvalue problem of the	
12:00 - 12:50	adiabatic computations for the case of hardest 2SAT and 3SAT	paramagnetic systems in a cavity driven by an AC external field	Liouvillian of a quantum dot system	
	realizations	diversity and external near		
12:30 - 14:00	Lunch	Lunch	Lunch	
	Kazue Kudo	Synge Todo	Akinori Nishino	
14.00 14.20	Coherent control of quantum	Topological order parameter in low	Exact many-electron scattering	
14:00 – 14:30		Topological order parameter in low dimensional magnets: QMC	Exact many-electron scattering states in a parallel-coupled double	
14:00 – 14:30	Coherent control of quantum	Topological order parameter in low dimensional magnets: QMC measurement of local quantized	Exact many-electron scattering	
14:00 - 14:30 14:30 - 14:40	Coherent control of quantum	Topological order parameter in low dimensional magnets: QMC	Exact many-electron scattering states in a parallel-coupled double	
	Coherent control of quantum dynamics by periodic driving	Topological order parameter in low dimensional magnets: QMC measurement of local quantized Berry phase	Exact many-electron scattering states in a parallel-coupled double quantum dot system	
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