

Program of The 5th International Workshop on Frontiers in Quantum Physics and Quantum Information

Conference Hall, CSRC, Beijing, 24 ~ 26 May, 2017

Wednesday, May 24, 2017	
09:00 ~ 09:10	Opening / Welcome
09:20 ~ 12:30 Morning Session	
09:10 ~ 10:00 (50 minutes)	Mats Jonson (University of Gothenburg) Spin polarization of Cooper pairs in spin-orbit active superconducting weak links
10:00 ~ 10:50 (50 minutes)	Naomichi Hatano (University of Tokyo) Non-Abelian gauge field theory of the spin-orbit interaction
10:50 ~ 11:30 (40 minutes)	<i>Photo Taking & Coffee Break</i>
11:30 ~ 12:20 (50 minutes)	Dimitrie Culcer (University of New South Wales) Spin blockade in hole quantum dots
12:20 ~ 14:00	<i>Lunch & Break</i>
14:00 ~ 15:40 Afternoon Session I	
14:00 ~ 14:50 (50 minutes)	YiJing Yan (University of Science and Technology of China) A unified quasi-particle theory for open quantum systems with non-Gaussian environment
14:50 ~ 15:40 (50 minutes)	Wei-Min Zhang (National Cheng Kung University) Quantum decoherence and transient quantum transport
15:40 ~ 16:10 (30 minutes)	<i>Coffee Break</i>
16:10 ~ 17:50 Afternoon Session II	
16:10 ~ 17:00 (50 minutes)	Ting Yu (Stevens Institute of Technology) A stochastic approach to open quantum systems: Theory and application
17:00 ~ 17:50 (50 minutes)	Jiushu Shao (Beijing Normal University) Stochastic theory of quantum Brownian dynamics
18:00 ~ 20:00	<i>Dinner</i>
Thursday, May 25, 2017	
09:00 ~ 12:00 Morning Session	
09:00 ~ 09:50 (50 minutes)	Ora Entin-Wohman (Ben Gurion University) Enhanced performance of three-terminal thermoelectric devices
09:50 ~ 10:40 (50 minutes)	Kaoru Yamamoto (University of Tokyo) Thermoelectricity near the Anderson localization transition

10:40 ~ 11:10 (30 minutes)	<i>Coffee Break</i>
11:10 ~ 12:00 (50 minutes)	Robert Shekhter (University of Gothenburg) Mechanically controlled electronic spin inelectric weak links
12:00 ~ 14:00	<i>Lunch & Poster Session</i>
14:00 ~ 15:30 Afternoon Session I	
14:00 ~ 14:50 (50 minutes)	Hsi-Sheng Goan (National Taiwan University) High-fidelity and robust two-qubit gates for quantum-dot spin qubits in silicon
14:50 ~ 15:40 (50 minutes)	Yasuhiro Utsumi (Mie University) Full counting statistics of information content and particle number
15:40 ~ 16:10 (30 minutes)	<i>Coffee Break</i>
16:10 ~ 17:50 Afternoon Session II	
16:10 ~ 17:00 (50 minutes)	Hang Zheng (Shanghai Jiaotong University) Quantum phase transition and spin dynamics of the spin-boson model
17:00 ~ 17:50 (50 minutes)	Jun Jing (Zhejiang University) Quantum control by noise
18:00 ~ 19:00	<i>Dinner</i>
Friday, May 26, 2017	
09:00 ~ 12:00 Morning Session	
09:00 ~ 09:50 (50 minutes)	Xuedong Hu (University at Buffalo, SUNY) Spin qubit transport in a double quantum dot
09:50 ~ 10:40 (50 minutes)	Xi Chen (Shanghai University) Reverse engineering approach for controlling the spin dynamics
10:40 ~ 11:10 (30 minutes)	<i>Coffee Break</i>
11:10 ~ 12:00 (50 minutes)	Mark Friesen (University of Wisconsin-Madison) Optimizing gate fidelities of a quantum dot hybrid qubit
12:00 ~ 13:30	<i>Lunch</i>
13:30 ~ 15:30 Afternoon Session	
13:30 ~ 14:20 (50 minutes)	Shmuel Gurvitz (Weizmann Institute) Generalized Landauer formula for time-dependent potentials and zero bias dc current
14:20 ~ 15:10 (50 minutes)	Stefano Chesi (Beijing Computational Science Research Center) Optimization of STIRAP-based state transfer under dissipation
15:10 ~ 15:30 (20 minutes)	Amnon Aharony (Ben Gurion University) Workshop Summary
	Jian-Qiang You (Beijing Computational Science Research Center) Closing Remarks