

The 8th KAKENHI Quantum cybernetics General Meeting
(FIRST-Quantum Information Processing Project / Kakenhi-Quantum cybernetics Project Annual Meeting 2012)

Date: 18th December, 2012
Place: ITO International Research Center, The University of Tokyo (Tokyo, Japan)
Participants: 19p.

Program:

time	speaker	Theme	Co-research G (Outside G)
19:15 – 19:25	J.S. Tsai	Opening remarks	
19:25 – 19:35	S. Urabe	Mechanical manipulation of ions using optical-lattice potentials	Y. Takahashi
		Coupling between laser-cooled ions and an optical nanofiber	S. Takeuchi
		Quantum state manipulation of ions in a magnetic field gradient	Y. Tokura
19:35 – 19:45	Y. Tokura	Work and fluctuation in quantum switches	Y. Utsumi
		Relaxation processes in silicon qubits	T. Koderu
		Self-ordering of nuclear spins by electron spin pumping	K. Ono
19:45 – 19:55	M. Kitagawa	Spin Amplification	(K. Fujii) (Y. Matsuzaki)
		Quantum Simulation with Nuclear Spins	(S. Miyashita) (M. Ohzeki)
		Automated Generation of Dynamical Decoupling Sequences	J.S. Tsai N. Mizuochi
		Molecular designs and spin properties of ensemble molecular spins coupled to QS qubits	J.S. Tsai
19:55 – 20:05	Y. Takahashi	Single-site manipulation by light-shift of a laser beam with inhomogeneous intensity distribution	S. Urabe
20:05 – 20:15	S. Takeuchi	Adaptive quantum estimation	A. Fujiwara
		Coupling between an optical nanofiber and a single ion	S. Urabe
		A study on a novel photonic quantum information processing by comparing totally different physical implementations	J.S. Tsai (K. Koshino)
		A collaborative study on diamond NV centers towards the quantum control of photons and solid state quantum bits.	N. Mizuochi (K. Koshino)
20:15 – 20:25	M. Koashi	Entanglement generation between an atomic ensemble and a photon in telecommunication band	Y. Takahashi
20:25 – 20:35	R. Van Meter	Heterogeneous Quantum Repeater Hardware	J.S. Tsai
20:35 – 20:50	K. Misawa (Advisor)	Comment on Sokatsuhan activity	
20:50 – 21:00	J.S. Tsai	Closing remarks	

Participants List:

	name	affiliation	position
1	Jaw-Shen Tsai	RIKEN / NEC Smart Energy Labs.	Team Leader
2	Yasuhiro Tokura	University of Tsukuba	Professor
3	Masahiro Kitagawa	Osaka University	Professor
4	Yoshiro Takahashi	Kyoto University	Professor
5	Shinji Urabe	Osaka University	Professor
6	Shigeki Takeuchi	Hokkaido University	Professor
7	Masato Koashi	The University of Tokyo	Professor
8	Rodney Van Meter	Keio University	Associate Professor
9	Simon Devitt	NII	Assistant Professor
10	Yasuaki Masumoto	University of Tsukuba	Professor
11	Tetsuo Koderu	Tokyo Institute of Technology	Assistant Professor
12	Yasuhiro Utsumi	Mie University	Associate Professor
13	Toshihiro Nakaoka	Sophia University	Associate Professor
14	Hideto Matsuoka	Tohoku University	Assistant Professor
15	Norikazu Mizuochi	Osaka University	Associate Professor
16	Takeji Takui	Osaka City University	Professor
17	Seigo Tarucha	The University of Tokyo	Professor
18	Yoshihisa Yamamoto	NII / Stanford University	Professor
19	Kazuhiko Misawa (Advisor)	Tokyo University of Agriculture and Technology	Professor