

KAKENHI Quantum Cybernetics Winter Meeting 2013

Date: 16th – 17th December., 2013

Place: Hyatt Regency KYOTO

Participants: 79p.

Program:

1st day: 16th December, 2013 (Mon)

Time	Theme	Speaker
10:00 – 10:15	Opening speech	Jaw-Shen Tsai
10:15 – 11:00	A01 Study of superconducting quantum cybernetics	Jaw-Shen Tsai
11:00 – 11:45	A02 Control, measure and transfer the quantum information in semiconductor nanosturctures	Yasuhiro Tokura
11:45 – 12:30	B01 Molecular spin quantum control	Masahiro Kitagawa
12:30 – 13:15	Luncheon meeting	
13:15 – 14:00	B01 Molecular optimization for synthetic spin qubits and spin QC/QIP manipulat	Takeji Takui
14:00 – 14:45	C01 Quantum control using cold atoms	Yoshiro Takahashi
14:45 – 15:30	C02 Quantum information processing using an ion trap system	Shinji Urabe
15:30 – 15:45	Break	
15:45 – 16:30	D01 Realization of quantum cybernetics using photonic quantum circuits	Shigeki Takeuchi
16:30 – 17:00	OSRP Heterogeneous Quantum Repeater Hardware	Rodney Van Meter
17:00 – 18:15	Discussion	
18:15 – 18:30	Break	
18:30 – 19:30	Lamp Session	
19:30 – 21:30	Poster session	

2nd day: 17th December, 2013 (Tue)

Time	Theme	Speaker
09:00 – 09:45	D02 Light-based multi-qubit quantum control	Masato Koashi
09:45 – 10:15	OSRP Accurate Resource estimation for large-scale quantum computation	Simon Devitt
10:15 – 10:45	OSRP Development of element technologies and elucidation of physics toward realization of silicon quantum bits	Tetsuo Kodera
10:45 – 11:00	Break	
11:00 – 11:30	OSRP Quantum non-equilibrium statistical physics and thermodynamics in the control and detection of quantum coherent processes	Yasuhiro Utsumi
11:30 – 12:00	OSRP Research on charge-state controlled single-photon device toward realizing long-distance transfer of electron spin state	Toshihiro Nakaoka
12:00 – 12:30	OSRP Trion resonant Kerr rotation in ZnO:Ga	Yasuaki Masumoto
12:30 – 13:15	Luncheon meeting	
13:15 – 13:45	OSRP Toward Manipulation of Quantum Spin Information in Biomolecules	Hideto Matsuoka
13:45 – 14:15	OSRP Research for electrical control of quantum information by NV center in	Norikazu Mizuuchi
14:15 – 15:15	Discussion	
15:15 – 15:30	Break	
15:30 – 16:30	Discussion	
16:30 – 16:45	Advisor's speech	Nobuko Naka
16:45 – 17:00	Closing speech	Jaw-Shen Tsai

Participants List:

	name	affiliation		name	affiliation
1	Yasuhiro Tokura	University of Tsukuba	41	Kenji Toyoda	Osaka University
2	Seigo Tarucha	University of Tokyo	42	Atsushi Noguchi	Osaka University
3	Michihisa Yamamoto	University of Tokyo	43	Kazuki Asama	Osaka University
4	Toshihiro Kubo	University of Tsukuba	44	Kenji Shimizu	Osaka University
5	Masahiko Taguchi	University of Tsukuba	45	Kazuhiko Kamitani	Osaka University
6	Satoshi Nakajima	University of Tsukuba	46	Shigeki Takeuchi	Hokkaido University
7	Tomohiro Otsuka	RIKEN	47	Ryo Okamoto	Hokkaido University
8	Kenta Takeda	University of Tokyo	48	Hideaki Takashima	Hokkaido University
9	Marcus L. Larsson	University of Tokyo	49	Tatsuro Sagawa	Hokkaido University
10	Masahiro Kitagawa	Osaka University	50	Andreas Schell	Humboldt–Universität zu Berlin
11	Akinori Kagawa	Osaka University	51	Masato Koashi	University of Tokyo
12	Makoto Negoro	Osaka University	52	Takashi Yamamoto	Osaka University
13	Takeji Takui	Osaka City University	53	Rikizo Ikuta	Osaka University
14	Kazunobu Satoh	Osaka City University	54	Hideto Matsuoka	Universitat Bonn/Osaka City University
15	Kazuo Toyota	Osaka City University	55	Simon Devitt	NII
16	Shigeki Nakazawa	Osaka City University	56	Toshihiro Nakaoka	Sophia University

17	Kenji Sugisaki	Osaka City University	57	Tetsuo Kodera	Tokyo Institute of Technology
18	Yuki Kanzaki	Osaka City University	58	Yasuaki Masumoto	University of Tsukuba
19	Kohji Maruyama	Osaka City University	59	Yasuhiro Utsumi	Mie University
20	Ayaka Tanaka	Osaka City University	60	Van Meter Rodney	Keio University
21	Takeshi Yamane	Osaka City University	61	Norikazu Mizuochi	Osaka University
22	Kazuhiro Ohkubo	Osaka City University	62	Hiroki Morishita	Osaka University
23	Lapasar E. Hosseini	Osaka City University	63	Toshiyuki Tashima	Osaka University
24	Rai Tohyama	Osaka University	64	Takaaki Shimooka	Osaka University
25	Yasuaki Saeki	Osaka University	65	Yuki Doi	Osaka University
26	Tatsunori Katoh	Osaka University	66	Shuta Mori	Osaka University
27	Takahiro Kitano	Osaka University	67	Satoshi Kobayashi	Osaka University
28	Yoshiro Takahashi	Kyoto University	68	Takahiro Fukui	Osaka University
29	Tetsuya Mukai	NTT Basic Research Laboratories	69	Fumitaka Ishibashi	Osaka University
30	Yosuke Takasu	Kyoto University	70	Nobuko Naka	Kyoto University
31	Takuya Hirano	Gashuin University	71	Natsuko Ishida	RIKEN
32	Hideaki Hara	Kyoto University	72	Jaw-Shen Tsai	RIKEN
33	Yusuke Nakamura	Kyoto University	73	Kunihiro Inomata	RIKEN
34	Hideki Ozawa	Kyoto University	74	Zhirong Lin	RIKEN
35	Takuma Kuno	Kyoto University	75	Tsuyoshi Yamamoto	RIKEN
36	Takumi Yamada	Kyoto University	76	Joonas Peltonen	RIKEN
37	Tomohiro Ichinose	Kyoto University	77	Zhihui Peng	RIKEN
38	Schaefer Florianr	Kyoto University	78	Pierre Billangeon	RIKEN
39	Shinji Urabe	Osaka University	79	Fumiki Yoshihara	RIKEN
40	Utako Tanaka	Osaka University			