

Program 21/Nov/2007 (Wed)

Time	Titile	Author(s)	Affiliation(s)
9:40	Opening remarks		
Session 1 Chair : Shigeki Takeuchi (Hokkaido University)			
9:50	Accidental cloning of a single-photon qubit in two-channel continuous-variable quantum teleportation	Toshiki Ide [a] , Holger F. Hofmann [b]	a: Okayama Institute for Quantum Physics , b: Graduate School of Advanced Sciences of Matter , Hiroshima University , c: JST-CREST
10:10	Tunable quantum interference: how to make morning , noon , and afternoon states	Holger F. Hofmann , Takafumi Ono	Hiroshima University
10:30	A method of quantum state reconstruction for spatial qubits generated by double slits	Katsuya Kasai , Holger F. Hofmann , Tatsuo Dogakiuchi , Gen Taguchi , Yutaka Kadoya	ADSM Hiroshima Univ.
10:50	Derivation of the 2 photon quantum dynamics of a non-linear system from semiclassical data	Hitoshi Nishitani [a] , H.F.Hofmann [a]	a:Univ of Hiroshima
11:10	Coffee break		
Session 2 Chair : Masao Kitano (Kyoto University)			
11:30	(Invited talk) Storage and reproduce of squeezed light by EIT	Mikio Kozuma	Tokyo Institute of Technology
12:30	Lunch		
Poster session 13:30 - 15:10			
Session 3 Chair : Ryuichi Sawae (Okayama University of Science)			
15:10	On the Test of Non-Locality of Quantum Mechanics by B-Mesons	Izumi Tsutsui [a] , Tsubasa Ichikawa [b] , Satoshi Tamura [b]	a: KEK , b: Univ. of Tokyo
15:30	Entangled coherent states and homodyne detection	Toru Kawakubo , Katsuji Yamamoto	Kyoto Univ.
15:50	Quantum nonlocality without entanglement in a pair of qubits	Masato Koashi, Fumitaka Takenaga, Suguru Yamamoto, Nobuyuki Imoto	Osaka University, JST-CREST
16:10	On the entanglement of mixed states supported on the symmetric subspace	Keii Matsumoto	a Natioanl Institute of Informatics , b ERATO-SORST , JST
16:30	Coffee break		
Session 4 Chair : Hayato Nakano (NTT Basic Research Labs.)			
16:50	(Invited talk) Introduction to quantum neurocomputation	Nobuyuki Matsui	University of Hyogo
Party 18:00 -			

Program 22/Nov/2007 (Thu)

Time	Title	Author(s)	Affiliation(s)
Session 5 Chair : Toshiaki Ide (Okayama Institute for Quantum Physics)			
9:00	Single-photon filtering by a photon blockade system	Kazuki Koshino	Tokyo M&D Univ , PRESTO-JST
9:20	An elementary optical gate for expanding entanglement web	Toshiyuki Tashima[a, b, c] , Sahin Kaya Ozdemir[a, b, c] , Takashi Yamamoto[a, b] , Masato Koashi[a, b, c] , Nobuyuki Imoto[a, b, c]	a:Univ. of Osaka , b:CREST , c:SORST
9:40	Verification of quantum-domain process using two non-orthogonal states	Ryo Namiki , Masato Koashi , Nobuyuki Imoto	JST-CREST , Osaka Univ.
10:00	Coffee break		
Session 6 Chair : Fujio Shimizu (The University of Electro-Communications)			
10:20	Geometric manipulation of cold two-level atoms and hybrid universal single qubit operation	Hiromitsu Imai , Atsuo Morinaga	Tokyo University of Science , Faculty of Science and Technology
10:40	Observation of Topological and Parity-dependent Phase of $m = 0$ Spin States	Koji Usami [a, b] , Mikio Kozuma [b, c]	a:JST-PRESTO , b:Tokyo Inst. Tech. , c:JST-CREST
11:00	High-speed quantum key distribution using sinusoidally gated InGaAs/InP avalanche photodiodes	Naoto Namekata[a] , Go Fujii[a] , Toshimori Honjo[b, c] , Hiroki Takesue[b, c] , Shuichiro Inoue[a]	a: Nihon Univ. , b: NTT , c: JST-CREST
11:20	Coffee break		
Session 7 Chair : Fumiaki Morikoshi (NTT Basic Research Labs.)			
11:40	(Tutorial talk) Introduction to cluster-state measurement computation	Tetsuro Nishino	The University of Electro-Communications
12:40	Lunch		
Session 8 Chair : Satoshi Ishizaka (NEC)			
13:40	Verification of correct answer rate on neiomorphic adiabatic quantum computaion algorithm	Aiko Ono [a] , Sigeo Sato [a] , Mitsunaga Kinjo [b] , Koji Nakajima [a]	a:Univ. of Tohoku , b:Univ. of Ryukyus
14:00	Equivalence between quantum simultaneous games and quantum sequential games	Naoki Kobayashi	Univ. of Tokyo
14:20	Quantum Leader Election: How to Convert (Almost) Any Probabilistic Algorithm into Exact Quantum Algorithm	Hirofada Kobayashi [a] , Keiji Matsumoto [a, b] , Seiichiro Tani [b, c]	a:NII , b:JST ERATO-SORST QCI Project , c:NTT Communication Science Labs.
14:40	Coffee break		

Time	Titile	Author(s)	Affiliation(s)
Session 9 Chair : Masanao Ozawa (Tohoku University)			
15:00	Minimum Work of 1-dim Photon Switching derived via Uncertainty Relation between Time and Negative Energy	Masahiro Hotta	Tohoku University
15:20	Accuracy matrix in generalized simultaneous measurement of a qubit system	Takahiro Sagawa [a] , Masahito Ueda [a , b]	a:Tokyo Tech , b:ERATO-JST
15:40	Detection of possible correlations from information of subsystem	Gen Kimura [a] , Hiromichi Ohno [b] , Hiroyuki Hayashi [c]	a: Univ. of Tohoku , b: Univ. of Kyusyu , c: Univ. of Waseda
16:00	Coffee break		
Session 10 Chair : Masato Koashi (Osaka University)			
16:20	Self-Correcting Quantum Programs	Francois Le Gall[a] , Tomoyuki Yamakami[b]	a: ERATO-SORST QCI Project , JST , b: Univ. of Aizu
16:40	Protected Rabi oscillation induced by natural interactions among physical qubits	Naoaki Kokubun , Akira Shimizu	Univ. of Tokyo
17:00	Optimal Entanglement Purification with Double Selection and Its Application	Keisuke Fujii [a] , Katsuji Yamamoto [a]	a:Kyoto University
17:20	Closing remarks		

Poster session

21/Nov/2007 (Wed) 13:30 - 15:10

No.	Title	Author(s)	Affiliation(s)
1	How to Optimally Measure a Momentum on a Half Line in Quantum Mechanics	Yutaka Shikano , Akio Hosoya	Tokyo Institute of Technology
2	A Primitive Consideration on Quantum Error Correction for Decoherence	Hayato Nakano	NTT Basic Research Labs.
3	Observation of time-bin entangled photon pairs using frequency up-conversion single photon	Takuro Hashimoto [a, b] , Hiroki Takesue [b, c] , Tsuneo Horiguchi [a]	a:Shibaura Institute of Technology , b:NTT Basic Research Laboratory , c:JST , CREST
4	Time-Domain Homodyne Measurement of a Pulsed Squeezed light in optical telecommunication band	Shunsuke Adachi[a] , Naoto Namekata[a] , Yuta Takahashi[a, b] , Susumu Machida[a] ,	a:Nihon University , b:Waseda University
5	High-speed photon number resolving with superconducting transition edge sensor	Go Fujii [a, b] , Daiji Fukuda [a] , Akio Yoshizawa [a] , Hidemi Tsuchida [a] , Masataka	a:AIST , b:Nihon Univ.
6	Entanglement by Scattering in 3D	Yuichiro Hida [a] , Kazuya Yuasa [b] , Hiromichi Nakazato [a]	a:Waseda Univ. , b:Univ. Bari , Italy
7	An Analysis of Quantum Communication Complexity Depending on Network Topologies	Seiichiro Tani [a] , Masaki Nakanishi [b] , Shigeru Yamashita [b]	a:NTT Communication Science Labs. , b: NAIST
8	Colored link representation of quantum entanglement states	Takayoshi Ootsuka	Kinki university
9	Quantum key distribution process for a success in a randomness test on the quantum crypto-key	Akihiro Tanaka , Wakako Maeda , Seigo Takahashi , Akio Tajima	NEC Corporation
10	A practical single photon detector for quantum crypto-system using ultra-small dual-APD module	Seigo Takahashi [a] , Akio Tajima [a] , Akihisa Tomita [ab]	a: NEC Corp. , b: ERATO-SORST , JST
11	On a quantum circuit for an effective pure state in NMR quantum computers , based on the product	Yoshiyuki Mori , Minaru Kawamura , Ryuichi Sawae , Kenichi Takarabe	Okayama University of Science
12	Implementation of geometrical quantum gates by a two-loop method in liquid-state NMR systems	Yukihiro Ota , Yasushi Kondo , Mikio Nakahara	Department of Physics , Kinki University
13	Comparison of schemes for realization of non-Gaussian operations	Jonas Soderholm [a] , Shuichiro Inoue [a]	a: Nihon University
14	Optical phase shift in resonance mode of a tapered fiber-microsphere resonator	Takeshi Asai , Hideaki Takashima , Hideki Huijiwara , Shigeki Takeuchi , Keiji Sasaki	RIES Hokkaido Univ.
15	Quantum pure state identification by LOCC	Y. Ishida , T. Hashimoto , M. Horibe , and A. Hayashi	Univ. of Fukui
16	Entanglement loss along a channel and approximate error correction	Francesco Buscemi	JST