

16:45 - 18:15 **Poster Session & Exhibition** (75 posters, 11 exhibitions)

Venue: "Prism"

P-1 High-Security 2.5 Gbit/s, Block-Ciphering M-Ary OCDM System

Takahiro Kodama¹, Nobuyuki Kataoka², Naoya Wada², Gabriella Cincotti³, Xu Wang⁴,
Tetsuya Miyazaki², Ken-ichi Kitayama¹

(¹ Osaka University, Japan, ² National Institute of Information and Communications Technology, Japan, ³ University Roma Tre, Italy, ⁴ Heriot-Watt University, United Kingdom)

P-2 Defeating Passive Eavesdropping Using Quantum Illumination

Maria Tengner, Tian Zhong, Franco N. C. Wong, Jeffrey H. Shapiro

(Research Laboratory of Electronics, Massachusetts Institute of Technology, United States)

P-3 Quantum Teleportation of Non-Gaussian Wavepackets of Light

Shuntaro Takeda, Noriyuki Lee, Hugo Benichi, Akira Furusawa

(The University of Tokyo, Japan)

P-4 Investigation of NV Centers in Diamond Nano Crystals by Laser Scanning Confocal Microscopy

Hong-Quan Zhao^{1,2}, Masazumi Fujiwara^{1,2}, Shigeki Takeuchi^{1,2}

(¹ Research Institute for Electronic Science, Hokkaido University, Japan, ² The Institute of Scientific and Industrial Research, Osaka University, Japan)

P-5 Quantum Super Dense Coding of a Two-Bit of Secure Key

Kaoru Shimizu, Kiyoshi Tamaki

(NTT Basic Research Laboratories, NTT Corporation, Japan)

P-6 Photon Subtraction from Traveling Fields - Recent Experimental Applications

Jonas S. Neergaard-Nielsen, Makoto Takeuchi, Kentaro Wakui, Hiroki Takahashi, Kazuhiro Hayasaka,
Masahiro Takeoka, Masahide Sasaki

(National Institute of Information and Communications Technology, Japan)

P-7 Entanglement Detection from Interference Fringes in Atom-Photon Systems

Jun Suzuki¹, Christian Miniatura^{2,3}, Kae Nemoto¹

(¹ National Institute of Informatics, Japan, ² INLN, France, ³ National University of Singapore, Singapore)

P-8 Additivity and Non-Additivity of Multipartite Entanglement Measures

Huangjun Zhu^{1,2}, Lin Chen¹, Masahito Hayashi^{3,1}

(¹ National University of Singapore, Singapore, ² NUS Graduate School for Integrative Sciences and Engineering, Singapore, ³ Tohoku University, Japan)

P-9 Discrimination of Transition Point in Quantum System

Daiki Akimoto¹, Masahito Hayashi^{1,2}

(¹ Tohoku University, Japan, ² National University of Singapore, Singapore)

P-10 Quantum Receiver Technologies: Minimum Error Detection and More

Masahiro Takeoka¹, Kenji Tsujino², Daiji Fukuda³, Go Fujii^{3,4}, Shuichiro Inoue⁴, Mikio Fujiwara¹,
Masahide Sasaki¹

(¹ National Institute of Information and Communications Technology, Japan, ² Japan Science and Technology Agency, Japan, ³ National Institute of Advanced Industrial Science and Technology, Japan, ⁴ Institute of Quantum Science, Nihon University, Japan)

P-11 Addressing the Ultimate Limits of Photon-Efficiency vs. Spectral-Efficiency Tradeoffs for the Multiple-Spatial-Mode Free-Space Optical Communication Channel

Saikat Guha¹, Jeffrey H. Shapiro², Zachary Dutton¹

(¹ Raytheon BBN Technologies, United States, ² Research Laboratories of Electronics, Massachusetts Institute of Technology, United States)

- P-12 On Differential PPM (DPPM) with Direct Detection in the Quantum Optical Channel**
 Antonio Assalini, Gianfranco Cariolaro, Roberto Corvaja, Nicola Dalla Pozza, Gianfranco Pierobon
 (University of Padua, Italy)
- P-13 Coherent Phase Shift Spectra of Fiber-Microsphere System at the Single Photon Level**
 Akira Tanaka^{1,2}, Kiyota Tobaru^{1,2}, Hideaki Takashima^{1,2}, Masazumi Fujiwara^{1,2}, Ryo Okamoto^{1,2},
 Shigeki Takeuchi^{1,2}
 (¹ Research Institute for Electronic Science, Hokkaido University, Japan, ² The Institute of Scientific and Industrial Research, Osaka
 University, Japan)
- P-14 State Dependent Forces on Trapped ⁴⁰Ca⁺ Driven by Phase-Locked Lasers**
 Shinsuke Haze, Naohisa Wada, Kenji Toyoda, Shinji Urabe
 (Osaka University, Japan)
- P-15 Optical Spin State Tomography of Electrons in Full Bloch Bases for Quantum Storage**
 Takahiro Inagaki^{1,2}, Hideo Kosaka^{1,2}, Yoshiaki Rikitake^{3,2}, Hiroshi Imamura^{4,2}, Yasuyoshi Mitsumori^{1,2},
 Keiichi Edamatsu¹
 (¹ Tohoku University, Japan, ² CREST, Japan Science and Technology Agency, Japan, ³ Sendai National College of Technology, Japan,
⁴ National Institute of Advanced Industrial Science and Technology, Japan)
- P-16 Tight Bound on Coherent-State-Based Entanglement Generation over Lossy Channels**
 Koji Azuma^{1,2}, Naoya Sota², Masato Koashi², Nobuyuki Imoto²
 (¹ NTT Basic Research Laboratories, Japan, ² Osaka University, Japan)
- P-17 Benchmark for the Genuine Quantum Memory and Gate**
 Ryo Namiki¹, Yuuki Tokunaga^{2,3}
 (¹ Kyoto University, Japan, ² NTT Information Sharing Platform Laboratories, NTT Corporation, Japan, ³ CREST, Japan Science and
 Technology Agency, Japan)
- P-18 Fundamental Limit to Qubit Control with Coherent Field**
 Kazuhiro Igeta^{1,2}, Nobuyuki Imoto³, Masato Koashi³
 (¹ NTT Basic Research Laboratories, NTT Corporation, Japan, ² CREST, Japan Science and Technology Agency, Japan, ³ Osaka University,
 Japan)
- P-19 Fundamental Accuracy Limit of an Arbitrary Single Qubit Gate under a Conservation Law**
 Tokishiro Karasawa¹, Kae Nemoto¹, Masanao Ozawa^{2,1}
 (¹ National Institute of Informatics, Japan, ² Nagoya University, Japan)
- P-20 A SU(N) Wigner Characteristic Function for N-Dimensional Systems**
 Todd Tilma, Kae Nemoto
 (National Institute of Informatics, Japan)
- P-21 Optimal Cloning of Qubits from Replicas of a Qubit and the States Orthogonal to It**
 Go Kato
 (NTT Communication Science Laboratories, NTT Corporation, Japan)
- P-22 Quantum Dynamics of Ultracold Fermionic Atoms in One-Dimensional Optical Superlattices**
 Makoto Yamashita^{1,4}, Atsushi Yamamoto^{2,4}, Norio Kawakami³
 (¹ NTT Basic Research Laboratories, NTT Corporation, Japan, ² Japan Atomic Energy Agency, Japan, ³ Kyoto University, Japan, ⁴ CREST,
 Japan Science and Technology Agency, Japan)
- P-23 Quantum Simulation of the Mott Transition in Bose-Fermi Mixtures in a Three Dimensional
 Optical Lattice: Quantitative Comparison between Theory and Experiments**
 Kensuke Inaba^{1,3}, Makoto Yamashita^{1,3}, Seiji Sugawa², Shintaro Taie², Rekishu Yamazaki^{2,3},
 Yoshiro Takahashi^{2,3}
 (¹ NTT Basic Research Laboratories, NTT Corporation, Japan, ² Kyoto University, Japan, ³ CREST, Japan Science and Technology Agency,
 Japan)

P-24 Superconducting Atom Chip as a Resource for Quantum Information Processing

Tetsuya Mukai

(NTT Basic Research Laboratories, NTT Corporation, Japan)

P-25 Development of Optical Frequency Transfer System in NICT

Miho Fujieda, Motohiro Kumagai, Shigeo Nagano, Ying Li, Tetsuya Ido

(National Institute of Information and Communications Technology, Japan)

P-26 Development of an Indium Ion Clock Laser

Ying Li, Shigeo Nagano, Hiroyuki Ito, Kensuke Matsubara, Mizuhiko Hosokawa, Kazuhiro Hayasaka

(National Institute of Information and Communications Technology, Japan)

P-27 Development of a 40-Calcium-Ion Optical Clock

Kensuke Matsubara, Ying Li, Shigeo Nagano, Hiroyuki Ito, Masatoshi Kajita, Reiko Kojima, Kazuhiro Hayasaka, Mizuhiko Hosokawa

(National Institute of Information and Communications Technology, Japan)

P-28 Non-Demolition Measurement of Coherent Spin State of YB⁺ Ions

Nobuyasu Shiga^{1,2}, Makoto Takeuchi¹

(¹ Presto, Japan Science and Technology Agency, Japan, ² National Institute of Information and Communications Technology, Japan)

P-29 Manipulation of Ion Chains for Indium Ion Frequency Standards

Kazuhiro Hayasaka

(National Institute of Information and Communications Technology, Japan)

P-30 High Harmonic Generation in VUV for Optical Clocks

Kentaro Wakui¹, Kazuhiro Hayasaka¹, Tetsuya Ido^{1,2}

(¹ National Institute of Information and Communications Technology, Japan, ² PRESTO, Japan Science and Technology Agency, Japan)

P-31 An ⁸⁷Sr Optical Lattice Clock at NICT

Atsushi Yamaguchi^{1,2}, Nobuyasu Shiga³, Shigeo Nagano¹, Ying Li¹, Mizuhiko Hosokawa¹, Tetsuya Ido^{1,2}

(¹ National Institute of Information and Communications Technology, Japan, ² CREST, Japan Science and Technology Agency, Japan, ³ PRESTO, Japan Science and Technology Agency, Japan)

Venue: "Glory"

P-32 RaQoon2: Extension of Internet Key Exchange to Use Quantum Key Distribution

Shota Nagayama, Rodney Van Meter

(Keio University, Japan)

P-33 Recent Findings from the Applications of QKD in Durban

Abdul Mirza¹, Francesco Petruccione^{1,2}

(¹ University of KwaZulu-Natal, South Africa, ² National Institute for Theoretical Physics, South Africa)

P-34 Investigation of Error Control Coding for Quantum Key Reconciliation on Q-Ti Network

Keattisak Sripimanwat, Patcharapong Treeviriyanyupab

(National Electronics and Computer Technology Center (NECTEC), Thailand)

P-35 A New Real-Time-Full-Connectivity Quantum Key Distribution Network

Shuang Wang, Wei Chen, Zheng-Qiang Yin, Zheng-Fu Han, Guang-Can Guo

(Key Laboratory of Quantum Information, University of Science and Technology of China, China)

P-36 Evaluation of Polarization Entanglement Created by Telecomband Entanglement Swapping

Yinghong Xue^{1,2}, Akio Yoshizawa^{1,2}, Hidemi Tsuchida^{1,2}

(¹ National Institute of Advanced Industrial Science and Technology, Japan, ² CREST, Japan Science and Technology Agency, Japan)

P-37 Deploying QKD in Standard Optical Networks

Daniel Lancho¹, Jesus Martinez-Mateo¹, David Elkouss¹, Alex Ciurana¹, Mercedes Soto², Vicente Martin¹

(¹ Universidad Politécnica de Madrid, Spain, ² Telefónica I+D, Spain)

P-38 Controlling the Phase Drift of a Quantum Channel Exploiting the Asymmetry of B92 Protocol

Giovanni Di Giuseppe, Marco Lucamarini, Rupesh Kumar, David Vitali, Paolo Tombesi

(University of Camerino, Italy)

P-39 Reliable and Hands-Off QKD System Based on Entanglement

Andreas Poppe¹, Andreas Allacher², Daniel Lancho^{1,3}, Michael Hentschel¹, Oliver Maurhart¹, Thomas Themel¹, Andreas Happe¹, Roland Lieger¹, Emanuel Jöbstl¹, C. Pacher¹, A. Treiber², M. Peev¹, R. Ursin⁴, A. Zeilinger^{2,4}

(¹ Austrian Institute of Technology, Austria, ² University of Vienna, Austria, ³ Universidad Politécnica de Madrid, Spain, ⁴ Institute for Quantum Optics and Quantum Information, Austrian Academy of Sciences, Austria)

P-40 How Secure Is Quantum Secure: Regenerative QKD in Practice

Nitin Jain^{1,3}, Lars Lydersen^{2,5}, Christoffer Wittmann^{1,3}, Carlos Wiechers^{1,4}, Christoph Marquardt^{1,3}, Vadim Makarov^{2,5}, Gerd Leuchs^{1,3}

(¹ Max Planck Institute for the Science of Light, Germany, ² Norwegian University of Science and Technology, Norway, ³ Institut für Optik, Information und Photonik, University of Erlangen-Nuremberg, Germany, ⁴ Universidad de Guanajuato, México, ⁵ University Graduate Center, Norway)

P-41 Cracking Commercial Quantum Cryptography

Lars Lydersen^{1,2}, Carlos Wiechers^{3,4,5}, Christoffer Wittmann^{3,4}, Dominique Elser^{3,4}, Johannes Skaar^{1,2}, Vadim Makarov¹

(¹ Norwegian University of Science and Technology, Norway, ² University Graduate Center, Norway, ³ Max Planck Institute for the Science of Light, Germany, ⁴ Institut für Optik, Information und Photonik, University of Erlangen-Nuremberg, Germany, ⁵ Universidad de Guanajuato, Mexico)

P-42 Experimental Demonstration of Intercept-Resend Attack with Time Fluctuation of Quantum Device Characteristics on QKD

Jun Hasegawa¹, Akihiro Tanaka², Akihisa Tomita^{1,3}, Shinichi Yorozu⁴

(¹ Quantum Computation and Information Project, ERATO-SORST, Japan Science and Technology Agency, Japan, ² System Platforms Research Laboratories, NEC Corporation, Japan, ³ Graduate School of Information Science and Technology, Hokkaido University, Japan, ⁴ Green Innovation Research Laboratories, NEC Corporation, Japan)

P-43 Experimental Implementation of Continuous-Variable Quantum Key Distribution Using a Single-Path Interferometer

Kazuhiro Murayama, Takako Ido, Ryosuke Kawasoe, Takuya Hirano

(Gakushuin University, Japan)

P-44 Utilizing Deadtimes of Single Photon Detectors for Eavesdropping without Detection

Sebastian Nauerth^{1,2}, Henning Weier^{1,2}, Markus Rau¹, Martin Fürst^{1,2}, Harald Weinfurter^{1,3}

(¹ Ludwig-Maximilians-Universität München, Germany, ² qtools GmbH, Germany, ³ Max-Planck-Institut für Quantenoptik, Germany)

P-45 High Speed Quantum Random Number Generation

Sebastian Nauerth^{1,2}, Martin Fürst^{1,2}, Henning Weier^{1,2}, Christian Kurtsiefer³, Harald Weinfurter^{1,4}

(¹ Ludwig-Maximilians-Universität München, Germany, ² qtools GmbH, Germany, ³ National University of Singapore, Singapore, ⁴ Max-Planck-Institut für Quantenoptik, Germany)

P-46 Freespace QKD Using a Quantum Dot-Micropillar Single Photon Source

Markus Rau¹, Sebastian Nauerth¹, Martin Fürst¹, Harald Weinfurter^{1,2}

(¹ Ludwig-Maximilians-Universität München, Germany, ² Max-Planck-Institut für Quantenoptik, Germany)

P-47 High Loss Quantum Key Distribution towards Satellite Uplink

Evan Meyer-Scott, Allison MacDonald, Zhizhong Yan, Thomas Jennewein
(Institute for Quantum Computing, University of Waterloo, Canada)

P-48 High-Speed Secret Key Distribution Using Phase Fluctuations

Tatsuya Tomaru
(Advanced Research Laboratory, Hitachi, Japan)

P-49 Tight Security Analysis of the Bennett-Brassard 1984 Protocol with Finite Key Lengths

Masahito Hayashi^{1,2}, Toyohiro Tsurumaru³
(¹Tohoku University, Japan, ²National University of Singapore, Singapore, ³Mitsubishi Electric Corporation, Japan)

P-50 Information Reconciliation for Quantum Key Distribution

David Elkouss, Jesus Martinez-Mateo, Daniel Lancho, Vicente Martin
(Universidad Politécnica de Madrid, Spain)

P-51 Quantum Circuit for Security Proof of Quantum Key Distribution without Encryption of Error Syndrome and Noisy Processing

Kiyoshi Tamaki^{1,2}, Go Kato³
(¹NTT Basic Research Laboratories, NTT Corporation, Japan, ²CREST, Japan Science and Technology Agency, Japan, ³NTT Communication Science Laboratories, NTT Corporation, Japan)

P-52 Boosting Up Quantum Key Distribution by Learning Multi-Photon Statistics of Practical Single-Photon Sources

Yoritoshi Adachi, Takashi Yamamoto, Masato Koashi, Nobuyuki Imoto
(Osaka University, Japan)

P-53 Passive Sources for Quantum Key Distribution

Marcos Curty¹, Xiongfeng Ma², Hoi-Kwong Lo³, Norbert Lütkenhaus^{2,4,5}
(¹University of Vigo, Spain, ²University of Waterloo, Canada, ³University of Toronto, Canada, ⁴University of Erlangen-Nürnberg, Germany, ⁵Max-Planck-Institute for the Science of Light, Germany)

P-54 Formal Approach for Security Proof of a QKD Protocol

Takahiro Kubota¹, Yoshihiko Kakutani¹, Go Kato², Yasuhito Kawano²
(¹The University of Tokyo, Japan, ²NTT Communication Science Laboratories, NTT Corporation, Japan)

P-55 Quantum Transmission Mechanism for Detection

Tien-Sheng Lin^{1,2}, Chia-Hung Chien¹, Sy-Yen Kuo¹
(¹National Taiwan University, Taiwan, ²Lan Yang Institute of Technology, Taiwan)

P-56 Quantum Key Distribution and Quantum Kolmogorov Complexity

Takayuki Miyadera
(National Institute of Advanced Industrial Science and Technology, Japan)

P-57 Squash Operator and Symmetry

Toyohiro Tsurumaru
(Mitsubishi Electric Corporation, Japan)

P-58 Quantum Indirect Shared Key Protocol

Tien-Sheng Lin^{1,2}, Chia-Hung Chien¹, Sy-Yen Kuo¹
(¹National Taiwan University, Taiwan, ²Lan Yang Institute of Technology, Taiwan)

P-59 Improving Classical Authentication with Quantum Communication

Francisco Marcos de Assis¹, Paulo Mateus^{2,3}, Yasser Omar^{2,4}
(¹Universidade Federal de Campina Grande, Brazil, ²Instituto de Telecomunicações, Portugal, ³IST, Technical University of Lisbon, Portugal, ⁴CEMAPRE, ISEG, Technical University of Lisbon, Portugal)

- P-60 Towards Long-Distance Gaussian Continuous-Variable Quantum Key Distribution**
 Vladyslav Usenko^{1,2}, Radim Filip¹
 (¹Palacky University of Olomouc, Czech Republic, ²Bogolyubov Institute for Theoretical Physics, Ukraine)
- P-61 Security of Quantum Key Distribution with Detection Efficiency Mismatch**
 Chi-Hang Fred Fung¹, Kiyoshi Tamaki², Bing Qi^{3,4}, Hoi-Kwong Lo^{3,4}, Xiongfeng Ma⁵
 (¹University of Hong Kong, China, ²NTT Basic Research Laboratories, NTT Corporation, Japan, ³Center for Quantum Information and Quantum Control, University of Toronto, Canada, ⁴University of Toronto, Canada, ⁵Institute for Quantum Computing, University of Waterloo, Canada)
- P-62 Ultra Low-Noise Single-Photon Detection Using a Sinusoidally Gated InGaAs/InP Avalanche Photodiode**
 Naoto Namekata, Taichi Kono, Shuichiro Inoue
 (Institute of Quantum Science, Nihon University, Japan)
- P-63 Photon Counter Based on Avalanche Photodiode Operating in Sub-Geiger Mode**
 Kenji Tsujino¹, Yoshito Miyamoto², Jun Kataoka², Akihisa Tomita^{1,3}
 (¹Japan Science and Technology Agency, Japan, ²Waseda University, Japan, ³Hokkaido University, Japan)
- P-64 Characterization of Narrow Strip Fibre-Coupled Superconducting Single Photon Detector**
 Alexander Korneev¹, Yulia Korneeva¹, Irina Florya¹, Alexander Divochiy², Yuri Vachtomin², Konstantin Smirnov², Gregory Goltsman¹
 (¹Moscow State Pedagogical University, Russian Federation, ²CJSC, Superconducting Nanotechnology (Scontel), Russian Federation)
- P-65 High Performance Multi-Channel Superconducting Nanowire Single-Photon Detector System**
 Taro Yamashita¹, Shigehito Miki¹, Mikio Fujiwara², Masahide Sasaki², Zhen Wang¹
 (¹Kobe Advanced ICT Research Center, National Institute of Information and Communications Technology, Japan, ²National Institute of Information and Communications Technology, Japan)
- P-66 Single Photon Detectors with Niobium Superconducting Nanowire**
 Go Fujii^{1,2}, Daiji Fukuda¹, Takayuki Numata¹, Akio Yoshizawa¹, Hidemi Tsuchida¹, Shuichiro Inoue², Tatsuya Zama¹
 (¹National Institute of Advanced Industrial Science and Technology, Japan, ²Institute of Quantum Science, Nihon University, Japan)
- P-67 Experimental Realization of a Noiseless Heralded Single Photon Source**
 Giorgio Brida¹, Ivo P. Degiovanni¹, Marco Genovese¹, Fabrizio Piacentini¹, Ivano Ruo Berchera¹, Sergey V. Polyakov², Alan Migdall²
 (¹I.N.R.I.M., Italy, ²National Institute of Standards and Technology, United States)
- P-68 Polarization Entangled Photon Source with Automated Alignment and Measurement Systems**
 Shawn X. Wang, Paul Moraw, Chun Chan, Gregory S. Kanter
 (NuCrypt, LLC, United States)
- P-69 Fiber-Copuled Microsphere at Cryogenic Temperatures for Cavity QED Experiments Using Single Diamond NV Centers**
 Masazumi Fujiwara^{1,2}, Kiyota Toubaru^{1,2}, Akira Tanaka^{1,2}, Hong-Quan Zhao^{1,2}, Hideaki Takashima^{1,2}, Keiji Sasaki¹, Shigeki Takeuchi^{1,2}
 (¹Research Institute for Electronic Science, Hokkaido University, Japan, ²The Institute of Scientific and Industrial Research, Osaka University, Japan)
- P-70 Correlated Photon-Pair Generation from Silicon Microring Resonators**
 Nobuyuki Matsuda^{1,2}, Takumi Kato¹, Koji Yamada³, Toshifumi Watanabe³, Tai Tsuchizawa³, Hiroshi Fukuda³, Seiichi Itabashi³, Keiichi Edamatsu¹
 (¹Research Institute of Electrical Communication, Tohoku University, Japan, ²NTT Basic Research Laboratories, NTT Corporation, Japan, ³NTT Microsystem Integration Laboratories, NTT Corporation, Japan)

P-71 Detection of Higher-Dimensional Effects in Orbital-Angular-Momentum Entangled Photon Pairs

Yoko Miyamoto¹, Shunsuke Aoki¹, Daisuke Kawase², Yusuke Ozaki¹, Shigeki Takeuchi^{2,3}, Susanne Zwick⁴, Mitsuo Takeda¹, Keiji Sasaki²

(¹ The University of Electro-Communications, Japan, ² Research Institute for Electronic Science, Hokkaido University, Japan, ³ Institute of Scientific and Industrial Research, Osaka University, Japan, ⁴ Institut für Technische Optik, Universität Stuttgart, Germany)

P-72 Carbon Nanotube Optoelectronic Devices for Single-Photon Generation

Hideyuki Maki, Takuma Yasuda, Yu Muronoi, Hiroyuki Wakahara, Tatsuya Mori

(Keio University, Japan)

P-73 Efficient Generation of Heralded Pure Single Photons and Their Nonclassical Interference

Rui-Bo Jin¹, Jun Zhang¹, Ryosuke Shimizu², Nobuyuki Matsuda¹, Yasuyoshi Mitsumori¹, Hideo Kosaka¹, Keiichi Edamatsu¹

(¹ Research Institute of Electrical Communication, Tohoku University, Japan, ² PRESTO, Japan Science and Technology Agency, Japan)

P-74 Direct Generation of Frequency-Uncorrelated Photons for Multi-Photon Interference

Masahiro Yabuno¹, Ryosuke Shimizu², Yasuyoshi Mitsumori¹, Hideo Kosaka¹, Keiichi Edamatsu¹

(¹ Research Institute of Electrical Communication, Tohoku University, Japan, ² PRESTO, Japan Science and Technology Agency, Japan)

P-75 Metropolitan All-Pass and Inter-City Quantum Communication Network

Kai Chen¹, Xiao Jiang^{1,2}, Teng-Yun Chen^{1,2}, Jian Wang^{1,2}, Hao Liang¹, Wei-Yue Liu^{2,3}, Yang Liu^{1,2}, Yuan Wang¹, Xu Wan¹, Wen-Qi Cai¹, Lei Ju^{1,2}, Luo-Kan Chen^{1,2}, Liu-Jun Wang¹, Yuan Gao¹, Cheng-Zhi Peng¹, Zeng-Bing Chen¹, Jian-Wei Pan¹

(¹ Hefei National Laboratory for Physical Sciences at Microscale and Department of Modern Physics, University of Science and Technology of China, China, ² Anhui Quantum Communication Technology Co., Ltd., China, ³ Ningbo University, China)