PQE XXXIX Participants

Bernhard W. Adams, Argonne National Laboratory
"Nuclear Gamma-Ray Superradiance"

Bernhard W. Adams, Argonne National Laboratory
"Parametric Down Conversion of X-Rays" (poster)

Eric Akkermans, Yale university and Technion-Israel
"Dicke superradiance and Anderson localization of photons"

Ofir E. Alon, Heidelberg University
"Quantum Dynamics of Attractive Bose Gases"

Takao Aoki, California Institute of Technology
"Strong coupling between one atom and a microtoroidal resonator"

V. Ara Apkarian, University of California at Irvine
"Nonlocal mechanics, environment induced coherence, and decoherence free states of an oscillator strongly coupled to the bath"

Ladan Arissian, Texas A&M University
"Intracavity phase measurement, sensor based on carrier to envelope frequency (CEO)"

John Arthur, SLAC
"Startup of the LCLS Free Electron Laser and plans for soft X-ray science in 2009"

Michal Bajcsy, Harvard University
"All-optical switch inside a hollow-core photonic-crystal fiber"

Gopalakrishnan Balasubramanian, Universität Stuttgart
"Super-resolution imaging using single spins in diamond"

Nir Bar-Gill, Weizmann Institute of Science
"Dynamic Decoherence Control in BEC Setups"

Thomas Becker, Max Planck Institute for Quantum Optics
"Cavity QED and Spectroscopy with Rydberg Atoms"

Alexey Belyanin, Texas A&M University
"Terahertz studies of collective excitations and microscopic physics in semiconductor magneto-plasmas"

Fetah Benabid, University of Bath
"What Hollow-Core Photonic Crystal Fiber brought to Coherent Stimulated Raman Scattering"

Rafi Bistritzer, University of Texas at Austin
"High Tc superfluidity in bilayer graphene"

Robert W. Boyd, University of Rochester
"Slow and Fast Light: Fundamentals and Applications"

Howard Brandt, U.S. Army Research Laboratory
"Quantum computational geodesics"

Hans J. Briegel, University of Innsbruck
"Entanglement in biological systems? - A quantum thermodynamic perspective"

Dmitry Budker, University of California at Berkeley
"The joy and utility of high-order atomic and nuclear polarization moments"

Aurel Bulgac, University of Washington
"The incredible many facets of a unitary Fermi gas"

Leonid Butov, University of California at San Diego
"Indirect Excitons"

Björn Butscher, University of Stuttgart
"Observation of ultra-long-range Rydberg molecules"

Robert L. Byer, Stanford University
"Laser Compression and Acceleration of Electrons"

Hans Peter Büchler, University of Stuttgart
"Quantum critical behavior in strongly interacting Rydberg gases"

Howard Carmichael, University of Auckland
"Quantum teleportation of the temporal correlations of light: squeezing and bandwidth requirements"

Lincoln Carr, Colorado School of Mines
"Many Body Entangled Quantum Dynamics of Ultracold Molecules"

Lincoln Carr, Colorado School of Mines
"Nonlinear Phenomena in Bose-Einstein Condensates: Atomic Soliton Lasers and Beyond" (poster)

James J. Carroll, Youngstown State University
"Search for induced depletion of nuclear isomers"

Jun-Tao Chang, Texas A&M University
"Cooperative Spontaneous Emission of N atoms: many-body eigenstates and their decay"

Hui-Chun Chien, Stanford University
"Observation of the Superfluid Deconfinement Crossover From 2D Berezinskii-Kosterlitz-Thouless Layers to a 3D Anisotropic Superfluid"

Cheng Chin, University of Chicago
"Novel Quantum Phases and Scalable Quantum Control of Two Atomic Species in Optical Lattices"

Kent D. Choquette, University of Illinois
"Decimated Cavity Photonic Crystal Membrane Laser"

Weng W. Chow, Sandia National Laboratories
"Update on our understanding of semiconductor-laser gain: from quantum well to quantum dots"

Eugene M. Chudnovsky, CUNY Lehman College and Graduate Center
"Cooperative Effects and Possibility of Superradiance in Crystals of Molecular Magnets"

Leon Cohen, City University of New York (Hunter College)
"A phase space approach to scattering"

Eric R. Colby, SLAC National Accelerator Laboratory
"The E-163 Advanced Accelerator Research Program at SLAC"

Barak Dayan, Weizmann Institute of Science
"Routing single photons with single atoms coupled to chip-based microcavities"

Pacôme Delva, ESA/ACT
"Atom interferometric detection of gravitational waves on ground and in space"

Peter Dombi, Hungarian Research Inst. for Solid-State Physics and Optics
"Surface Plasmon Enhanced Electron Acceleration with Few-Cycle Laser Pulses"

Peter D. Drummond, Swinburne University of Technology
"Theory of strongly interacting Fermi gases"

Geoffrey Duxbury, University of Strathclyde, Glasgow
"Quantum cascade laser spectroscopy: Diagnostics to non-linear optics"

Hichem Eleuch, Texas A&M University
"Excitation of atomic coherence using off-resonant, strong Laser pulses" (poster)

Abdulhakem Y. Elezzabi, University of Alberta
"Spinplasmonics: Controlling Plasmon Propagation via Electron Spin"

Baris I. Erkmen, NASA Jet Propulsion Laboratory
"Unified theory of classical and quantum ghost imaging"

Fredrik Fatemi, Naval Research Laboratory
"Imaging magnetic fields using stimulated Raman transitions in a cold atom cloud"

Nathaniel J. Fisch, Princeton University Plasma Physics Laboratory
"Cooling Particles with Waves: from 10^6 eV to 10^5 eV or from 10^-8 eV to 10^-9 eV"

Jason Fleischer, Princeton University
"Nonlinear Self-Filtering via Dynamical Stochastic Resonance"

Ron Folman, Ben-Gurion University, Israel
"Atomchips: where material engineering meets atom optics"

József Fortágh, University of Tübingen
"Meissner effect in superconducting microtraps"

Eugene Frumker, Texas A&M University
"Two-dimensional phase-only spatial light modulators for dynamic phase and amplitude pulse shaping"

Edward S. Fry, Texas A&M University
"Do Experimental Violations of Bell Inequalities Imply a Non-Local Interpretation of Quantum Mechanics?"

Thomas F. Gallagher, University of Virginia
"Superradiance in the Frozen Rydberg Gas"

Shaoyan Gao, Texas A&M University
"Coherent control of elastic and Raman fluorescence channels in a 3-level system" (poster)

Daniel J. Gauthier, Duke University
"Room-Temperature Spectral Hole Burning via SBS"

Andy Geraci, NIST
"Cold atoms coupled to a magnetic micro-cantilever"

Dagmar Gerthsen, University of Karlsruhe
"Transmission Electron Microscopy of Nonperiodic InGaAs/GaAs Quantum Well Structures"

Dagmar Gerthsen, University of Karlsruhe
"Towards Quantification of the In-Distribution in InAs Quantum Dots by Transmission Electron Microscopy" (poster)

Philippe Goldner, Ecole Nationale Supérieure de Chimie
"Rare earth doped crystals for quantum memories"

Ariunbold Gombojav, Texas A&M University
"Temporal behavior of Ultraviolet Raman Superradiance" (poster)

Alexander A. Govyadinov, University of Pennsylvania
"Phaseless 3D Optical Tomography with Subwavelength Resolution"

Alexander A. Govyadinov, University of Pennsylvania
"Superluminal SPP Pulses in Linear Chains of Metallic Nanoshperoids" (poster)

David Grojo, National Research Council, Canada
"Multiphoton Ionization and Nanoscale Modifications inside Transparent Solids"

Simon Gröblacher, IQOQI, Austrian Academy of Sciences
"Laser-Cooling of Micromechanical Resonators in a Cryogenic Cavity"

Kohzo Hakuta, University of Electro- Communications, Japan
"Manipulating Atoms and Photons Using Optical Nanofibers"

Elmar Haller, Experimental Physik University of Innsbruck
"From an ideal gas to the super-Tonks-Girardeau regime with tunable interactions"

Hiro-o Hamaguchi, The University of Tokyo
"Can Raman spectroscopy measure and quantify life?"

Jack Harris, Yale University
"Improved 'position squared' readout of a mechanical oscillator using degenerate cavity modes"

Matthew Hastings, Los Alamos National Laboratory
"Synchronization and Dephasing of Many-Body States"

Mark Havey, Old Dominion University
"Near-resonance light scattering in high density and ultracold 87Rb"

Mark Havey, Old Dominion University
"Parametric resonance of ultracold and high density Rb atoms confined to an optical dipole trap" (poster)

Mark Havey, Old Dominion University
"Optical pumping dynamics and near-resonance light scattering in an ultracold sample of Rb atoms" (poster)

Antoine Heidmann, Laboratoire Kastler Brossel, CNRS
"Optomechanical correlations between light and mirrors"

Philip Hemmer, Texas A&M University
"Practical limits to sub-wavelength imaging"

Joshua R. Hendrickson, The University of Arizona
"Exciton Polaritons in 1D Fibonacci Quasicrystals"

Jason Hogan, Stanford University
"Precision gravimetry and test of the Equivalence Principle with a 10-meter atomic fountain"

Tomoyuki Horikiri, National Institute of Informatics, Japan and Stanford University
"Second order coherence of exciton-polariton condensates"

John Howell, University of Rochester
"Applications of Slow And Stopped Light"

Hermes Huang, Yale University
"Single Particle Aerosol Detection using Laser-Induced Fluorescence" (poster)

Randall G. Hulet, Rice University
"Exploring transport of a weakly-interacting BEC in a random potential"

Hannes Hübel, University of Vienna
"Entanglement based Quantum Cryptography: From intra city links to inter island quantum communication"

Hannes Hübel, University of Vienna
"Robust and reliable entanglement based QKD over 50km" (poster)

Francesco Intravaia, Universität Potsdam
Surface Plasmons and the Casimir Effect"

Pankaj Kumar Jha, Texas A&M University
"New Analytical Solutions for Two Level Systems" (poster)

Chan Joshi, UCLA
"Laser-Plasma Accelerators for Generating Directional X-ray beams"

Robin Kaiser, INLN, CNRS, UNSA
"Quantum Multiple Scattering"

Robin Kaiser, INLN, CNRS, UNSA
"Photon Lévy Flight in a Rubidium Vapor" (poster)

Robin Kaiser, INLN, CNRS, UNSA
"Toward a Random Laser with Cold Atoms" (poster)

Rina Kanamoto, Ochanomizu University, Japan
"Quantum phase transition, symmetry breaking, and entanglement in one-dimensional Bose gas"

Rina Kanamoto, Ochanomizu University, Japan
"Quantum phase transition, symmetry breaking, and entanglement in one-dimensional Bose gas" (poster)

Henry C. Kapteyn, JILA – University of Colorado at Boulder
"Ultrafast Tabletop Diffractive Microscopy and Nanothermal Imaging using Coherent High Harmonic Beams"

Sanjit Karmakar, University of Maryland, Baltimore County
"Can two-photon interference of thermal light be considered as statistical correlation or anti-correlation of intensity fluctuations?"

Sanjit Karmakar, University of Maryland, Baltimore County
"Can two-photon interference of thermal light be considered as statistical correlation of intensity fluctuations?" (poster)

Keith Kastella, SRI International
"Selective detection of entangled photons"

Masayuki Katsuragawa, University of Electro- Communications, Japan
"Octave-spanning Raman comb stabilized to an optical frequency standard"

James F. Kelly, DOE; Pacific Northwest National Laboratory
"Empirical studies of swept gain effects in molecular lambda transitions"

Uday Khankhoje, California Institute of Technology
"Fabrication and Characterization of Slab Microcavities" (poster)

Galina Khitrova, University of Arizona
"Nonperiodic Nanophotonics"

Jacob Khurgin, Johns Hopkins University
"Interface roughness and ionized impurity broadening -is it homogeneous or not?"

Fam Le Kien, University of Electro- Communications, Japan
"Slowing down of a guided light field along a nanofiber embedded in a cold atomic gas" (poster)

Moochan Kim, Texas A&M University
"Condensation and Fluctuation for the weakly interacting N-Boson System"

Niels Kjaergaard, Niels Bohr Institute
"Squeezing of Atomic Quantum Projection Noise"

Olga Kocharovskaya, Texas A&M University
"Quantum coherence effects in solids: New applications"

Vitaly Kocharovsky, Texas A&M University
"Mesoscopic BEC phase transition"

Alexander Korotkov, University of California at Riverside
"Quantum uncollapsing: theory and experiment"

Andrey Krayev, AIST-NT Inc
"SPM+Raman - Integrated Solution for Modern Photonics and Plasmonics"

Norbert Kroó, Hungarian Academy of Sciences
"Nonlinear plasmonics and some applications"

Andy Kung, Academia Sinica, Taiwan
"Controlling the carrier-envelope phase of Raman generated single-cycle pulses"

Gershon Kurizki, Weizmann Institute of Science
"Ultrafast Cooling of Quantum Bits Within the Bath Memory"

Jaan Laane, Texas A&M University
"Spectroscopic investigations and potential functions for pyridine and 1,3-butadiene in ground and excited electronic states"

Arnaud Landragin, SYRTE-Observatoire de Paris
"Inertial sensors with cold atoms"

Arnaud Landragin, SYRTE-Observatoire de Paris
"Off-resonant Raman transitions in an atom interferometer" (poster)

Karyn Le Hur, Yale University
"Entanglement and Decoherence of Two level Systems in a Boson bath: A unified Approach for solid-state devices, cold atomic systems, and photons"

Aaron Leanhardt, University of Michigan
"An Electron Electric Dipole Moment Search in the $^3\Delta 1$ Ground State of Tungsten Carbide Molecules"

Alexandra Ledermann, Institute of Nanotech., Forschungszentrum Karlsruhe
"Optical properties of three-dimensional photonic quasicrystals and their periodic approximants"

M. Howard Lee, University of Georgia
"Ergodicity and Chaos in a system of harmonic oscillators"

Kevin K. Lehmann, University of Virginia
"Cavity Enhanced Absorption Spectroscopy with a Supercontinuum Source"

Miklos Lenner, Hungarian Research Inst. for Solid-State Physics and Optics
"Nonlinear STM Plasmonics"

Michael P. Lilly, Sandia National Laboratories
Coulomb drag in the exciton regime in electron-hole bilayers"

Marc Litz, U.S. Army Research Laboratory
"Potential of electron-beam ionization for accelerated decay of radioisotopes"
W. Vincent Liu, University of Pittsburgh
"Crystalline superfluidity of cold atoms in lattice p-bands"
Patrick Loughlin, University of Pittsburgh
"Local phase space moments of a pulse propagating with dispersion and damping"
Alexander Lvovsky, University of Calgary
"Process tomography of quantum-optical memory"
Alberto M. Marino, NIST
"Entangled Images from Four-Wave Mixing"
Rainer Martini, Stevens Institute of Technology
"High speed all-optical modulation of a Quantum Cascade Laser"
Eric Mazur, Harvard University
"Optically hyperdoped semiconductors"
Christopher McGuinness, Stanford University
"Accelerating Electrons with Lasers and Photonic Crystals"
Christopher McGuinness, Stanford University
"Woodpile Structure Fabrication for Photonic Crystal Laser Particle Accelerators" (poster)
Michael Mehring, Universität Stuttgart
"Phase Control of Quantum States"
Carmen Menoni, Colorado State University
"Nanometer scale imaging with extreme ultraviolet lasers"
Dieter Meschede, Unversity of Bonn
"Controlling neutral atoms for quantum information processing in a 1D optical lattice"
Ronald Meyers, Army Research Laboratory
"Thermal Ghost Imaging Experiments"
John Miao, University of California at Los Angeles
"Lensless Diffraction Microscopy: Seeing the Invisible with Computational Algorithms"
Alan Migdall, NIST Gaithersburg
"Fiber-Based Entangled Photon Source Progress and Applications (a 2500 year history)"
Eugeniy Mikhailov, The College of William & Mary
"Low-frequency vacuum squeezing in Rb vapor"
Anthony Miller, Stanford University
"Magnetometry with Cold Atomic Ensembles"
David A. B. Miller, Stanford University
"Limits to Dispersive and Slow Light Optical Devices"
Masoud Mohseni, Harvard University
"Correlation-enhanced quantum process tomography"
Nimrod Moiseyev, Technion, Israel
"Photo induced conical intersections in molecular optical lattices: the phenomenon and its consequence"
Christian P. Morath, Sandia National Laboratories
"Density imbalance effect on the Coulomb drag upturn in an undoped electron-hole bilayer" (poster)
John J. L. Morton, University of Oxford
"Solid state quantum memory using nuclear spins"
Shaul Mukamel, University of California at Irvine
"Nonlinear Spectroscopy with Entangled Photons; Manipulating Quantum Pathways of Matter"
Margaret Murnane, JILA – University of Colorado at Boulder
"Observing the Coupled Motions of Electrons and Atoms in Polyatomic Molecules"
John M. Myers, Harvard University
"Contingent choice of states to simplify a quantum decision problem of light detection"

Holger Müller, University of California at Berkeley
"Large area atom interferometry"

Frank A. Narducci, Naval Air Systems Command
"Useful Diagnostics in the construction of a Gradient Magnetometer Atom Interferometer"

Frank A. Narducci, Naval Air Systems Command
"Propagation of pulses in a four level medium" (poster)

Kali Prasanna Nayak, University of Electro- Communications, Japan
"Optical Nanofibers for Manipulating Atoms and Photons" (poster)

Irina Novikova, The College of William & Mary
"Optimal control of light pulse storage and retrieval in atomic vapor"

Chris O'Brien, Texas A&M University
"Coherent Enhancement of Refractive Index in Solids using Excited State Absorption"

Ken O'Hara, The Pennsylvania State University
"Experiments with an ultracold three-component Fermi gas"

Koryun Oganesyan, Yerevan Physics Institute, Armenia
"Detection of Casimir Photons with Electrons"

Koryun Oganesyan, Yerevan Physics Institute, Armenia
"The Undulator Radiation in Terahertz Region" (poster)

Koryun Oganesyan, Yerevan Physics Institute, Armenia
"Formation of relativistic positron systems and their decay to X-rays by the axial channeling of positrons in ionic crystals" (poster)

Alexei Ourjoumtsev, Max Planck Institute for Quantum Optics
"Two-photon gateway in one-atom cavity quantum electrodynamics"

Alexei Ourjoumtsev, Max Planck Institute for Quantum Optics
"Two-photon gateway in one-atom cavity quantum electrodynamics" (poster)

John Page, University of Manitoba
"Localization of ultrasonic waves in a three-dimensional elastic network"

Nino R. Pereira, Ecopulse
"Cost Estimates for Power or Energy from Nuclear Isomers"

Pierre Pillet, Laboratoire Aimé Cotton, CNRS, Univ Paris-Sud
"Broaband laser for detection and cooling of molecules."

Aron Pinczuk, Columbia University
"Quantum Hall States seen as Quantum Liquids"

Martin Plenio, Imperial College London
"Measuring Measurement and Quantitative Entanglement Verification"

Alexander N. Poddubny, Ioffe Physical-Technical Institute of the RAS
"Theory of Light Coupled Exciton Polaritons in Nonperiodic Quantum Wells"

Viktor A. Podolskiy, Oregon State University
"Eliminating Losses and Out-of-Plane Scattering of Surface Plasmon Polaritons with Active Metamaterials"

Viktor A. Podolskiy, Oregon State University
"Hyper-gratings: nanophotonics in planar anisotropic metamaterials" (poster)

Markus Pollnau, University of Twente
"Monitoring of DNA molecules in a lab on a chip with femtosecond laser written waveguides"

Michelle Povinelli, University of Southern California
"Trapping Light in Optical Microcavities via Dynamic Tuning"

Gabriel Price, University of Texas at Austin
"Single-Photon Cooling to the Limit of Trap Dynamics: Maxwell's Demon Near Maximum Efficiency" (poster)

Han Pu, Rice University
Dynamics of vector solitons in two-species atomic condensate"

Mark Raizen, University of Texas at Austin
"Maxwell's Demon near Maximal Efficiency"

Ernst M. Rasel, Leibniz Universität Hannover
"Bose-Einstein condensates in extended free fall"

Patrick Rebentrost, Harvard University
"The role of quantum coherence in excitonic energy transfer in photosynthetic complexes"

Margaret Reid, Swinburne University of Technology
"EPR, Steering and Bell inequalities"

Ben Richards, University of Arizona
"AFM studies of surface grating formation in MBE-grown InGaAs/GaAs multiple quantum well structures" (poster)

Martin Richardson, Townes Institute, College of Optics, UCF
"Playing with plasmas"

Grant Ritchie, University of Oxford
"Applications of quantum cascade lasers in chemical kinetics and dynamics"

Jorge J. Rocca, Colorado State University
"Phase-coherent injection-seeded soft x-ray lasers"

Yuri Rostovtsev, Texas A&M University
"Atomic coherence excited by off-resonant strong laser pulses: theory and experiment and the role of absolute phase"

Ronald D. Ruth, Lyncean Technologies, Inc. and SLAC
"Accelerator-Laser Compton X-rays for medical applications"

Ralf Röhlsberger, Deutsches Elektronen Synchrotron DESY
"Directional Emission of X-rays from Rotating Matter: The Nuclear Lighthouse Effect"

Ralf Röhlsberger, Deutsches Elektronen Synchrotron DESY
"The Nuclear Lighthouse Effect" (poster)

Mark Sadgrove, CREST project, Japan Science and Technology Agency
"Computing exponential sums with a Bose-Einstein condensate"

Anne Sakdinawat, University of California, Berkeley
"X-ray Imaging with Specialized Diffractive Optics"

Barry C. Sanders, University of Calgary
"Complete Characterization of Quantum-Optical Processes"

Zoe-Elizabeth Sariyanni, JILA / University of Colorado at Boulder
"Exorcizing Maxwell's Demon via Quantum Mechanics"

Anatoliy Savchenkov, OEwaves Inc.
"Low repetition rate all-optical frequency comb"

Peter Schmelcher, University of Heidelberg
"Correlated Tunneling and Interferences in Strongly Interacting Low-Dimensional Bosonic Systems"

Holger Schmidt, University of California at Santa Cruz
"Atomic spectroscopy and quantum interference on a chip"

Ferdinand Schmidt-Kaler, Universität Ulm
"A deterministic single ion source for nm-spatial deterministic doping of solid state devices"

Marlan O. Scully, Texas A&M and Princeton University
"The Lamb Shift Yesterday, Today, and Tomorrow"

Eyob A. Sete, Texas A&M University
"The Lamb Shift in Single photon Dicke Superradiance"

Eyob A. Sete, Texas A&M University
"Two-photon excitation in three two-level atom system: Dicke Superradiance" (poster)

Selim Shahriar, Northwestern University
"Putting Superluminosity to Work: From Data Buffering to Ultraprecise Magnetometry"

Krister Shalm, University of Toronto
"The Symmetry of Spin-Squeezing: Quantum State Tomography on a Sphere"

Yan Hua Shih, University of Maryland at Baltimore County
"Thermal ghost imaging: What is quantum? What is classical?"

Yuri Shvyd'ko, Argonne National Laboratory
"X-Ray Free Electron Laser Oscillator: a Future Fully Coherent X-ray Source"

Irfan Siddiqi, University of California at Berkeley
"Non-linear Dispersive Measurement with Superconducting Circuits"

Andrii Sizhuk, Texas A&M University
"Fluctuations of Particle Number in Two-component Interacting Bose-Einstein Condensate"

Sebastian Slama, University of Tübingen, Germany
"Collective light scattering from ultracold atoms in optical cavities"

Alexei Sokolov, Texas A&M University
"Novel Light Sources Utilizing Maximal Quantum Coherence in Molecular Gasses and Solids"

Ian Spielman, NIST, Gaithersburg
"Realization of the Bose-Hubbard model in non-standard lattice potentials: tools, experiments, and a simple model"

Dan Stamper-Kurn, University of California at Berkeley
"Magnetic phases of a dipolar spin-1 quantum gas"

Daniel Steck, University of Oregon
"All-Optical One-Way Barrier for Alkali Atoms"

Nikolai Stelmakh, University of Texas at Arlington
"Lateral mode structure of wide-ridge Quantum Cascade lasers"

Nikolai Stelmakh, University of Texas at Arlington
"Parametric gain for multimode light" (poster)

Douglas Stone, Yale University
"Ab Initio Theory of Novel Micro and Nano Lasers"

Dmitry Strekalov, JPL/Caltech
"Optical combs via cascaded four-wave mixing in a bichromatically pumped whispering gallery mode resonator"

Szymon Suckewer, Princeton University
"Flapless FemtosecLASIK"

Misha Sumetsky, OFS Labs
"Optical microcoil resonator"

Anatoly Svidzinsky, Texas A&M University
"Cooperative spontaneous emission of N atoms: effect of virtual photons and classical analogy with N harmonic oscillators"

Julian Sweet, University of Arizona
"Nonlinear Reflectivity of Fibonacci Quantum Wells" (poster)

Vincenzo Tamma, University of Maryland, Baltimore County
"Exponential Sums Algorithm based on Optical Interference: Factorization of arbitrary large numbers in a single run"

George J. Thomas, University of Missouri - Kansas City
"Mechanisms of Virus Assembly Probed by Raman Spectroscopy"

John Thomas, Duke University
"Fermi Gases with Tunable Interactions"

Paolo Tombesi, University of Camerino, Italy
"Cooling and Entanglement in Cavity Optomechanics"

Carlos Trallero, National Research Council, Canada
"Multiphoton transitions in the strong field limit: From atoms to molecules"

Ben Varcoe, University of Leeds
"Precision Test of Lorentz Invariance using EIT"

Andreas Volkmer, Universität Stuttgart
"Coherent Raman microscopy: Exploring the chemical and physical structure of individual biopolymers, living cells, and tissue"

Damien Weidmann, STFC Rutherford Appleton Laboratory
"Broadband laser heterodyne spectroscopy using an external cavity quantum cascade laser"

George R. Welch, Texas A&M University
"CARS and FAST-CARS detection of biological molecules such as glucose and cholesterol"

Herbert G. Winful, University of Michigan
"Tunneling time in photonic structures"

Congjun Wu, University of California at San Diego
"Novel quantum phases in orbital systems with cold atom optical lattices"

Jonathan Wurtele, UC Berkeley and LBNL
"Brightness and Phase Space Considerations in FEL Optimization" (poster)

Sabine Wölk, Universität Ulm
"Factorization with Gauss sums"

Hui Xia, Princeton and Texas A&M University
"Experiments on applying surface enhancement in FAST-CARS" (poster)

Xiaoliang Sunney Xie, Harvard University
"Single Molecule and Nonlinear Raman Microscopy for Biology and Medicine"

Zhenda Xie, University of Maryland, Baltimore County
"Can two-photon interference of thermal light be considered as statistical correlation or anti-correlation of intensity fluctuations?" (poster)

Vladislav V. Yakovlev, University of Wisconsin at Milwaukee
"Stimulated Raman scattering: old physics, new applications"

Zhenshan Yang, Texas A&M University
"'Backward Heisenberg Picture' Approach for Spontaneous Parametric Down-Conversion and Spontaneous Emission" (poster)

Deniz Yavuz, University of Wisconsin at Madison
"Refractive index enhancement with vanishing absorption in an atomic vapor"

Matthew Zepf, Queen's University Belfast
"High harmonics from relativistically oscillating plasma surfaces – a high brightness attosecond source at keV photon energies"

Alexander A. Zholents, Lawrence Berkeley National Laboratory
"Array of free electron lasers for science with soft x-rays"

Shi-Yao Zhu, Hong Kong Baptist University
"Hanbury Brown-Twiss effect and thermal light ghost imaging"

Yifu Zhu, Florida International University
"Atomic coherence and interference in a coupled atom-cavity system"

Lawrence Ziegler, Boston University
"Barcoding bacteria by surface enhanced Raman microscopy: rapid pathogen detection at the single cell level"