

PQE XXXV Participants

Chris Adami, Keck Graduate Institute/Caltech

“Black holes conserve information in curved-space quantum field theory”

Roland E. Allen, Texas A&M University

“Response of benzene and dipicolinic acid to ultrafast laser pulses”

Esen E. Alp, Argonne National Laboratory

“Inelastic X-Ray Scattering Techniques and Their Applications”

Paul M. Alsing, Air Force Research Laboratory

“Ion Trap Simulation of the Unruh Effect”

Paul M. Alsing, Air Force Research Laboratory

“Laser Cooling of Semiconductors” (poster)

Petr Anisimov, Texas A&M University

““MAGIC-angle” technique for suppression of inhomogeneous broadening of Mossbauer spectra”

Anton Biryukov, Texas A&M University

“Nonlinear Wave Mixing in GaAs/InGaAs/InGaP Butt-Joint Diode Lasers” (poster)

Harry Atwater, California Institute of Technology

“Strong Coupling in Plasmonic Materials”

Yoav Avitzour, Princeton University

“Possibility for compact recombination XRLs using Optical Field Ionization”

Mark Baldo, Massachusetts Institute of Technology

“Molecular circuits from Photosynthetic complexes”

Victor S. Batista, Yale University

“Creating and Manipulating Electronic Coherences in Functionalized Semiconductor Nanostructures”

Guy Beadie, Naval Research Laboratory

“CARS Detection: How Can We Optimize Sensitivity?”

Thomas Becker, Max-Planck Institut für Quantenoptik

“Cavity QED with the Micromaser: From Fock-State Generation to Phase Diffusion”

Alexey Belyanin, Texas A&M University

“Coherent nonlinear optics with quantum-cascade structures”

Alexander A. Betin, Raytheon

Irving Bigio, Boston University

“Optical biopsy: noninvasive detection of cancer with elastic-scattering spectroscopy”

Jonathan Bird, SUNY at Buffalo

“Electron Waveguides for Quantum Computing: Spin & Wave-Based Approaches”

Steve Blair, University of Utah

“Molecular detection and nonlinear optics with metallic nanocavities”

Robert Boyd, University of Rochester
“Progress in Quantum Lithography and Ghost Imaging”

Sergey Bozhevolnyi, University of Aalborg, Denmark
“Polaritonics: photonics based on surface plasmon polaritons”

Danielle Braje, Stanford University
“Nonlinear Optics Using Electromagnetically Induced Transparency in Cold Atoms”

Howard Brandt, ARL
“Design for a Quantum Cryptographic Entangling Probe”

Mark Brongersma, Stanford University
“Towards CMOS Compatible Nanophotonics and Plasmonics”

Paul Brumer, University of Toronto
“Coherent Control of Radiationless Transitions”

Dmitry Budker, University of California at Berkeley
“Selective addressing and applications of high-order atomic polarization moments”

Leonid Butov, University of California at San Diego
“Experiments on Exciton Condensation and “Pattern Formation in Coupled Quantum Wells”

Federico Capasso, Harvard University
“New frontiers in quantum cascade laser research”

Frank Caroll, Vanderbilt U. Medical Center
“Applications of High Intensity laser-based X-ray imaging and therapy”

James J. Carroll, Youngstown University
“An experimental perspective on releasing energy from nuclear isomers”

Gordon Cates, University of Virginia
“Progress using Laser Polarized Noble Gases for Magnetic Resonance in Medicine”

Paul Champion, Northeastern University
“Exploring Low-Frequency Modes in Biomolecules Using Femtosecond Coherence Spectroscopy”

Juntao Chang, Texas A&M University
“Three qubit quantum phase gate based on cavity QED” (poster)

Connie Chang-Hasnain, University of California at Berkeley
“50GHz VCSEL - no speed limit in sight”

Goong Chen, Texas A&M University
“Generalized Two-Centered Orbitals in the Modeling of Diatomic Molecules and Relevant Asymptotics”

Kent Choquette, University of Illinois
“Vertical Cavity Photonic Crystal Lasers”

Weng Chow, Sandia National Laboratory

- Ignazio Ciufolini**, Universita' di Lecce, Italy
"Accurate measurement of frame-dragging using the LAGEOS satellites and the GRACE Earth gravity models"
- Douglas Cline**, University of Rochester
"Nuclear structure studies of nuclear isomers and implications for controlled energy release"
- Leon Cohen**, City University of New York (Hunter College)
"Time-Frequency Evolution of the Quantum Langevin Equation"
- Paul Corkum**, National Research Council of Canada
"Attosecond Imaging: Using a Molecule's own Electrons to Image Molecular Orbitals"
- Michael E. Crenshaw**, US Army RDECOM
"Quantum Electrodynamics Foundations of Continuum Electrodynamics"
- Scott Crooker**, Los Alamos National Laboratory
"Imaging electron spin flows in semiconductors in the presence of electric, magnetic, and strain fields"
- Barak Dayan**, Weizmann Institute of Science, Israel
"Nonlinear interactions with entangled photons and high-power down-converted light"
- Barak Dayan**, Weizmann Institute of Science, Israel
"Sum-Frequency Generation and Temporal Shaping of Entangled Photons" (poster)
- Dennis G. Deppe**, University of Texas at Austin
"Lithographically defined all epitaxial grating confined VCSELs and their applications to quantum-optics experiments"
- Tiegang Di**, Texas A&M University
"Teleportation of Arbitrary Atomic Dicke States" (poster)
- Arthur Dogariu**, NEC Laboratories America
"Correlated photons via cascaded four-wave mixing in microstructured fiber"
- Jonathan P. Dowling**, Louisiana State University
"Quantum Optical Sensing, Imaging, and Computing"
- Vladimir P. Drachev**, Purdue University
"Nonlinear Spectroscopy of Metal Quantum Dots"
- Peter Drummond**, University of Queensland, Australia
"Atoms in optical lattices and the Fermi sign problem"
- Sang-Kee Eah**, The University of Chicago and Argonne
"Scattered light interference of a single metal nanoparticle and its mirror image"
- Matt Eisaman**, Harvard University
"Quantum Control of Single Photons using Electromagnetically Induced Transparency"
- Matt Eisaman**, Harvard University
"Quantum Control of Single Photons using Electromagnetically Induced Transparency" (poster)
- Ihab El-kady**, Sandia National Laboratory
"Thermal emission from photonic crystals: Does it exceed blackbody radiation?"

Elinor Irish, University of Rochester
“Quantum Electro-Mechanics: Cavity QED beyond the rotating-wave approximation” (poster)

Francis Everitt, Stanford University
“Gravity Probe B On-Orbit: Processing the Science Data”

James Franson, Johns Hopkins University
“Linear Optics Quantum Computing”

Sabine Freisem, University of Texas at Austin

Edward S. Fry, Texas A&M University
“Nonlocality in Quantum Mechanics”

Xinyong Fu, Shanghai Jiao Tong University
“Realization of Maxwell’s Hypothesis”

Zitao Fu, Shanghai Jiao Tong University

Stephen A. Fulling, Texas A&M University
“Review of some recent work on acceleration radiation”

Ildar Gabitov, University of Arizona
“Nonlinear electrodynamics of ultrashort pulses in a medium with negative refractive index”

Alexander Gaeta, Cornell University
“Slow Light in Optical Fibers”

Daniel J. Gauthier, Duke University
“New techniques for ultra-low light-level nonlinear optics”

Joseph Giordmaine, Princeton University
“Slowing the dephasing of molecular coherence”

Oliver Gloeckl, University of Erlangen, Germany
“From phase measurements on intense light beams to entanglement generation by spatial separation of quantum sidebands”

Claire Gmachl, Princeton University
“Intersubband transitions beyond QC lasers”

Stefanie Gräfe, Wuerzburg University, Germany
“Instantaneous dynamics and quantum control fields: principle and numerical applications”

Stefanie Gräfe, Wuerzburg University, Germany
“Quantum Control Fields from Instantaneous Dynamics” (poster)

Michel de Haan, Université Libre de Bruxelles
“Field theory reformulated without self-energy parts”

Naomi Halas, Rice University
“Plasmonic Nanosensors”

Dennis G. Harris, The Boeing Co.

- Stephen E. Harris**, Stanford University
“Fourier Synthesis of Optical Waveforms”
- Joseph W. Haus**, University of Dayton
“Nanophotonics”
- Timothy F. Havel**, Massachusetts Institute of Technology
“Some Connections between Protein NMR Spectroscopy and NMR Quantum Computing”
- Mark D. Havey**, Old Dominion University
“Mesoscopic Wave Dynamics in Ultracold Atomic Rb”
- Daniel J. Heinzen**, University of Texas at Austin
“Superfluid and insulating states of a Bose gas in an optical lattice”
- Philip Hemmer**, Texas A&M University
“VLSI quantum computer in diamond”
- Peter Herman**, University of Toronto
“Ultrafast laser processing: controlling heat accumulation effects with variable repetition rate”
- Hans Hertz**, Royal Institute of Technology, Stockholm
“Sources and optics for table-top biomedical x-ray imaging”
- Mark Hillery**, Hunter College, CUNY
“Discriminating multipartite states”
- Chris Hovde**, Southwest Sciences
“Earth-Field Atomic Magnetometry with Frequency-Modulated Light”
- John Howell**, University of Rochester
“Time-Energy EPR Entanglement”
- Paul S. Hsu**, Texas A&M University
“Nonlinear Magneto Optic Rotation at High Laser Intensity” (poster)
- David H. Hughes**, Air Force Research Laboratory
- Geoffrey Hunter**, York University
“Experimental Confirmation of the Photon as an Ellipsoidal Soliton”
- Geoffrey Hunter**, York University
“No Spooky Actions at a Distance in the Kim-Shih Realization of Popper’s EPR Experiment” (poster)
- David Hyland**, Texas A&M University
“Quantum Optics and Exosolar Planet Detection”
- Elinor Irish**, University of Rochester
“Quantum Electro-Mechanics: Cavity QED beyond the rotating-wave approximation”
- Stephen Jesse**, Oak Ridge National Lab / UTK
“Modelling the evolution of surface micro-structures on laser irradiated silicon”

- Nikolai Kalugin**, Texas A&M University
“Multi-phonon Infrared Spectra of thin polycrystalline films and monocrystals of dipicolinic acid”
- Masayuki Katsuragawa**, University of Electro-Communications, Japan
“Ultrashort pulse generation using coherent molecular oscillation”
- Peter D. Keefe**, Keefe & Associates
“Does the Adiabatic First Order Phase Transition of a Type I Superconductor Particle Pose a Quantum Limit to the Second Law?”
- Peter D. Keefe**, Keefe & Associates
“Intellectual Property for Scientists” (poster)
- Peter D. Keefe**, Keefe & Associates
“Does the Adiabatic First Order Phase Transition of a Type I Superconductor Particle Pose a Quantum Limit to the Second Law?” (poster)
- Michael Key**, Lawrence Livermore National Laboratory
“Physics of the fast Ignitor”
- Jacob Khurgin**, Johns Hopkins University
“Parametric Slow Light Structures”
- Wolfgang Kiefer**, Wuerzburg University, Germany
“Femtosecond coherent four-wave mixing spectroscopy and applications”
- Jean-Claude Kieffer**, INRS Canada
“Phase contrast radiography with Ultrafast laser based X-ray source alser baser”
- Fam Le Kien**, University of Electro-Communications, Japan
“Atom traps and waveguides using evanescent light fields around subwavelength-diameter fibers”
- Peter G. Kik**, CREOL, University of Central Florida
“Resonant near-field excitation of surface plasmons for applications in imaging and optical interconnects”
- Barnabas Kim**, Texas A&M University
“Introduction to Dimensional Scaling in Simple Molecules” (poster)
- Jungsang Kim**, Duke University
“Optical Networking and Quantum Communication Networks” (poster)
- Derek Kimball**, University of California at Berkeley
“Can a Quantum Nondemolition Measurement Improve the Sensitivity of an Atomic Magnetometer?”
- Manfred Kleber**, Technische Universität München
“Imaging Atoms with Evanescent Waves”
- Manfred Kleber**, Technische Universität München
“Fermi Gases in External Fields” (poster)
- Olga Kocharovskaya**, Texas A&M University
“Laser manipulations of nuclear transitions”
- Vitaly Kocharovsky**, Texas A&M University
“Interband Nonlinear Mixing Lasers for Mid/Far-Infrared Generation”

Roman Kolesov, Texas A&M University

“Influence of electromagnetic radiation on the Mossbauer spectra through co-dopants.”

Karl L. Kompa, Max-Planck Institut für Quantenoptik

“Molecules as Nanoscopic Information Devices”

Junichiro Kono, Rice University

“Optical Signatures of the Aharonov-Bohm Phase in Carbon Nanotubes”

Junichiro Kono, Rice University

“Light Emission from Excitons under Intense Laser Excitations in Strong Magnetic Fields” (poster)

Alexander Korotkov, University of California at Riverside

“Quantum feedback control in solid-state mesoscopics”

Petr Kral, University of Illinois at Chicago

“Control of catalytic activity of proteins in vivo”

Norbert Kroó, Hungarian Academy of Sciences

“Near field microscopy with surface plasmons and their statistical properties”

Makoto Kuwata-Gonokami, University of Tokyo

“Optical manipulation of cold excitons in a quantum degenerate regime”

Makoto Kuwata-Gonokami, University of Tokyo

“Optical manipulation of cold excitons in a quantum degenerate regime” (poster)

Alex Kuzmich, Georgia Institute of Technology

“Quantum networking with atomic ensembles”

Elena Kuznetsova, Texas A&M University

“Solitary waves in amplifying media with excited-state absorption”

Elena Kuznetsova, Texas A&M University

“Solitary waves in amplifying media with excited-state absorption” (poster)

Jaan Laane, Texas A&M University

“Spectroscopic Investigations of Molecular Structures in Electronic Excited States”

Jean-Pierre Leburton, University of Illinois at Urbana-Champaign

“Charge stability and exchange engineering in coupled quantum dots”

Kotik Lee, Booz Allen Hamilton

M. Howard Lee, University of Georgia

Wim Leemans, Lawrence Berkeley National Laboratory

“Laser Plasma-based accelerators: their potential for High Energy Physics”

Kevin Lehmann, Princeton University

“Cavity Ring-down Spectroscopy”

Gerd Leuchs, University of Erlangen, Germany

“Continuous Variable Quantum Algorithms”

Leonid Levitov, Massachusetts Institute of Technology
“theory of exciton condensation and pattern formation in coupled quantum wells”

Fuli Li, Texas A&M University
“Coherence induced entanglement”

Michal Lipson, Cornell University
“Manipulating light using highly confining nanophotonic structures”

Michael G. Littman, Princeton University
“Beating Diffraction with a Binary Mask – Shaped Pupil Coronagraph and the Optical Search for Planets about Nearby Stars”

Robert Lucht, Purdue University
“Nonperturbative Modeling of Coherent Anti-Stokes Raman Scattering with Ultrafast Lasers”

Jeff Lundeen, University of Toronto
“Applications of a nonlinear photon switch to Hardy’s Paradox and Bell-state determination”

Allan MacDonald, University of Texas at Austin
“Excitonic Bose Condensation in Quantum Hall Bilayers”

Joe Mait, U.S. Army Research Laboratory
“A Historical Perspective of Imaging”

Lute Maleki, Jet Propulsion Laboratory
“Hyper parametric oscillation and squeezing in crystalline whispering gallery mode resonators”

Metin S. Mangir, HRL Laboratories
“Coherent, Self-organized Fiber Laser Arrays” (poster)

Marlan O. Scully et al., Texas A&M University
“Charge-Exchange X-Ray Lasers”

Andrey Matsko, Jet Propulsion Laboratory
“Magnetometer based on the opto-electronic microwave oscillator”

Anne Matsuura, AFOSR

Eric Mazur, Harvard University
“Wrapping light around a hair”

J. Barry McManus, Aerodyne Research, Inc.
“Trace gas measurements using pulsed QC lasers: atmospheric and environmental applications”

Ian McNulty, Argonne National Laboratory
“X-ray coherence and microscopy”

Manjusha Mehendale, Princeton University
“All UV time resolved coherent anti-Stokes Raman scattering”

John Miao, University of California at Los Angeles
“Coherent Imaging and Its Applications”

- Eugeniy Mikhailov**, Massachusetts Institute of Technology
“Development of a stable low-frequency squeezed vacuum source for precision position measurement”
- Richard Miles**, Princeton University
“Spectral Methods for Imaging High-Speed Fluid Flow”
- Kazuhiko Misawa**, Tokyo University of Agriculture and Technology
“Real-time wave-packet dynamics and wave-packet engineering”
- G rard Mourou**, U. of Michigan and LOA ENSTA/Ecole Polytechnique Fr.
“Relativistic Optics”
- Tobias Mueller**, Universit t Hannover
“Sagnac Interferometry with Cold Atoms” (poster)
- Robert Murawski**, Texas A&M University
“Optical Modulation of a Type I Quantum Cascade Laser” (poster)
- Ashok Muthukrishnan**, Texas A&M University
“A global approach to quantum searching using the quantum FFT” (poster)
- Tanya L. Myers**, Pacific Northwest National Laboratory
“Quantum Cascade Laser Transmitters for Sensors and Other Applications”
- Kyungsun Na**, University of Texas at Austin
“Chaos Assisted STIRAP”
- Frank Narducci**, Naval Air Systems Command
“Atomic Magnetometry with Laser-Trapped Atoms”
- Evgenii E. Narimanov**, Princeton University
“Chaotic Microlasers Based on Dynamical Anderson Localization”
- John Nees**, University of Michigan
“Relativistic Optics: A route to high intensity attosecond pulses”
- Cun-Zheng Ning**, NASA Ames Center for Nanotechnology
“Possibility of two-photon lasing using intersubband transitions in semiconductor nanostructures”
- Cun-Zheng Ning**, NASA Ames Center for Nanotechnology
“Induced transparency, two-photon lasing, and many-body interaction in intersubband transitions in semiconductor nanostructures” (poster)
- Julien Niset**, Ecole Polytechnique and Universite Libre de Bruxelles
“Quantum cloning with continuous variables”
- Noam Erez**, Texas A&M University
“Surrealistic Bohmian Trajectories” (poster)
- Mikhail Noginov**, Norfolk State University
“Effect of silver nanoparticles on luminescence of Eu³⁺ ions in organic and inorganic materials”
- Irina Novikova**, Harvard Smithsonian Center for Astrophysics
“Study of the three-photon absorption resonances as a challenger for the atomic clock”

- Irina Novikova**, Harvard Smithsonian Center for Astrophysics
“The effect of atomic diffusion on slow and stored light in Rb vapor” (poster)
- Maxim Olshanii**, University of Southern California
“Interatomic Interactions and Interference”
- Chong H. (Raymond) Ooi**, Texas A&M University
“Enhanced Nonlinear CARS Backscattering via Quantum Coherence for Remote Detection of Anthrax Spores”
- Andreas Ostendorf**, Laser Zentrum Hannover
“Patterning of silicon surfaces by ps and fs laser pulses”
- Leonard Parker**, University of Wisconsin at Milwaukee
“Cosmology and Quantum Field Theory in the Curved Spacetime of General Relativity”
- Anil K. Patnaik**, Texas A&M University
“Raman Photon Pair Correlations Via the Onsager Regression Theorem”
- Claudio Pellegrini**, University of California at Los Angeles
“Status of development of X-Ray FEL and some new ideas”
- John Pendry**, Imperial College
“Metamaterials Open New Vistas in Optics”
- Peter S. Pershan**, Harvard University
“X-ray optics of liquid surfaces”
- Dmitry Pestov**, Texas A&M University
“Femtosecond CARS on organic molecules”
- Dmitry Pestov**, Texas A&M University
“Femtosecond CARS on organic molecules” (poster)
- Loren Pfeiffer**, Bell Laboratories
“Design considerations of GaAs samples intended to demonstrate excitonic BEC”
- Kim Ta Phuoc**, LOA ENSTA/Ecole Polytechnique Fr.
“Generation of X-ray beams using lasers from the acceleration of energetic electrons”
- Todd B. Pittman**, Johns Hopkins University
“Heralding single photons from pulsed down-conversion”
- E. E. Narimanov and V. A. Podolskiy**, Princeton University
“The materials with giant (THz) anisotropy for negative refraction” (poster)
- Viktor A. Podolskiy**, Oregon State University
“Nanostructured non-magnetic left-handed composites”
- Eric O. Potma**, Harvard University
“Biology seen through the window of CARS”
- De-Kui Qing**, Texas A&M University
“Delay-Time-Bandwidth Product in Slow Light”

- Mark Raizen**, University of Texas at Austin
“Quantum Dynamics and Transport in Low-Dimensional Bose Gases”
- Ronen Rapaport**, Bell-Labs, Lucent Technologies
“Excitons in luminescent rings and artificial traps”
- Ernst Rasel**, Universität Hannover
“Atom optics on ground and in space”
- Aleksander Rebane**, Montana State University
“1-2-3 photon spectroscopy of NLO chromophores”
- Linda Reichl**, University of Texas at Austin
“Electron waveguide quantum computers”
- Margaret Reid**, University of Queensland, Australia
“Criteria for entanglement of macroscopic superpositions”
- David Reis**, University of Michigan
“Picosecond resolved x-ray scattering”
- Robert W. Byren**, Raytheon Company
- Jorge Rocca**, Colorado State University
“High repetition rate table-top and desk-top size soft x-ray lasers”
- Mike Romalis**, Princeton University
“High-density alkali-metal magnetometers and their applications”
- Yuri Rostovtsev**, Texas A&M University
“Electromagnetically Induced Coherent Scattering (EICS) in Backward Direction”
- Chandrasekhar Roychoudhuri**, University of Connecticut
“Measuring properties of superposed light beams carrying different frequencies”
- Edward (Ted) Sargent**, University of Toronto
“Infrared Colloidal Quantum Dots: Electroluminescent, Photovoltaic, and Modulation Devices”
- Zoe-Elizabeth Sariyanni**, Texas A&M University
“Femtosecond CARS on molecules: Gaining Insight from a Theoretical Analysis”
- Petra Sauer**, Texas A&M University
“Dissociation of organic benzene-like molecules under ultra-fast laser pulses” (poster)
- Vladimir A. Sautenkov**, Texas A&M University
“UV coherent absorption spectroscopy for anthrax”
- Vincenzo Savona**, Swiss Federal Institute of Technology-Lausanne
“Quantum complementarity of microcavity polaritons”
- Michael Scalora**, U.S. Army Aviation and Missile Command
“Negative Refraction of Ultrashort Electromagnetic Pulses”

- Giuliano Scarcelli**, UMBC
“Quantum imaging using thermal and Raman photon pairs”
- Axel Scherer**, California Institute of Technology
“Photonic crystals - basics and prospects”
- Wolfgang Schleich**, Universität Ulm
“New Frontiers in General Relativity”
- Ulrich Schreiber**, Universität Essen
“Beyond the 6th decimal – High Precision Sagnac Interferometry”
- Peter Schwindt**, NIST, Boulder
“Microfabricated Atomic Magnetometers”
- James Scully**, American Airlines
- Judy Scully**, PQE
- Marlan O. Scully**, Texas A&M University
“Using Quantum Mechanics to Exorcise Maxwell’s Demon”
- Chris Search**, Stevens Institute of Technology
“Quantum Atom Optics: Non-classical Dynamics of Matter-Waves Coupled to Light Fields”
- Neil Shafer-Ray**, University of Oklahoma
“Proposed Measurement of CP violating effects using ultra-cold molecules confined to a Stark-Gravitational trap” (poster)
- Vladimir M. Shalaev**, Purdue University
“Plasmonic Nanophotonics: Coupling Light to Nanoscale via Plasmons”
- Gennady Shvets**, University of Texas at Austin
“Band engineering using electrostatic resonances: applications to super-lensing”
- Torsten Siebert**, Wuerzburg University, Germany
“Optimizing population-transfer to excited vibrational states in femtosecond time-resolved coherent anti-stokes Raman Scattering for enhanced molecular recognition”
- Jon Sjogren**, Air Force Research Laboratory
- Art Smirl**, University of Iowa
“Stopping, Trapping and Releasing Light in Doubly-Resonant Nanostructures”
- Winthrop W. Smith**, The University of Connecticut
“Cold ion-neutral collisions in a hybrid trap” (poster)
- Alexei Sokolov**, Texas A&M University
“Toward powerful single-cycle laser pulses”
- Charles Stafford**, University of Arizona
“Spontaneous formation of nanoscale electron waveguides”
- Mark I. Stockman**, Georgia State University
“Coherent, nonlinear, and quantum nanoplasmonics”

Gottfried Strasser, Technical University of Wien
“Surface emitting quantum cascade lasers”

Dmitry V. Strekalov, Jet Propulsion Laboratory
“Quantum-correlation metrology with biphotons: where is the limit?”

Szymon Suckewer, Princeton University
“X-Ray Lasers via Optical Field Ionization”

Sune Svanberg, University of Lund, Sweden
“Diagnostics and treatment of tumours using laser techniques”

Anatoly Svidzinsky, Texas A&M University
“Bohr model analysis of diatomic molecules” (poster)

Phillip Szuromi, Science Magazine

Richard J. Tansey, Lockheed Martin

Henryk Temkin, Texas Tech University
“Semiconductor Light Sources for the Ultraviolet”

Ioannis Thanopoulos, University of British Columbia and
“Coherent Control of Nucleotide Base Pair Mutations”

Raanan Tobey, University of Colorado
“Nonlinear High-Frequency Photoacoustic Spectroscopy using EUV Light”

Alfred U’Ren, CISESE
“Applied Photon Entanglement with Multi-Element Sources”

William G. Unruh, University of British Columbia, Vancouver
“Dumb Holes and Slow light– Testing Black Hole Physics in the Lab”

Kerry Vahala, California Institute of Technology
“ $Q > 100$ -million optical micro-resonators on silicon and applications”

Edo Waks, Stanford University
“Single Photon Sources”

Herbert Walther, Max-Planck Institut für Quantenoptik
“Recent Advances in Cavity Quantum Electrodynamics”

James Weaver, Massachusetts Institute of Technology
“Transport, sources and sinks: A multiscale, modular approach to modeling systems in biology and medicine”

Antoine Weis, Université de Fribourg
“The human heart beat seen by cesium magnetometers”

Stephan Groeger and Antoine Weis, Université de Fribourg
“Cesium magnetometers for a neutron EDM experiment” (poster)

David S. Weiss, Pennsylvania State University
“Observation of a 1D Tonks-Girardeau gas”

- George R. Welch**, Texas A&M University
“Enhanced coupling between optical and sound waves in the forward direction via ultra-slow light”
- Jim Wolfe**, University of Illinois at Urbana-Champaign
“Excitons in Cu₂O, To BEC or not to BEC?”
- Matthais Wollenhaupt**, Universität Kassel
“Quantum Control Using Intense Shaped Pulses”
- Jonathan S. Wurtele**, University of California at Berkeley
“Ultra-high intensity femtosecond laser via Raman Amplification for X-Ray Lasers”
- Gerard Wysocki**, Rice University
“Quantum cascade laser based trace-gas sensors for human breath analysis”
- Min Xiao**, University of Arkansas
“All-optical switching with enhanced Kerr nonlinearity in EIT system”
- Rui-Hua Xie**, Texas A&M University
“Density functional study for characterization of dipicolinic acid” (poster)
- Han Xiong**, Texas A&M University
“Correlated Spontaneous Emission Laser as an Entanglement Amplifier” (poster)
- Steve Yalisove**, University of Michigan
“Ultrafast laser interaction with Si-SiO₂ interfaces”
- Yoshihisa Yamamoto**, Stanford University
“Condensate of Polaritons in Microcavities”
- Nan Yu**, Jet Propulsion Laboratory
“Ultra-low noise optical pulse generation through regenerative Q of the mode-locked laser”
- Nan Yu**, Jet Propulsion Laboratory
“Ultra-low noise optical pulse generation through regenerative Q of the mode-locked laser” (poster)
- Aihua Zhang**, Texas A&M University
“Diode-Pumped Rubidium Laser” (poster)
- Yifu Zhu**, Florida International University
“Nonlinear wave mixing with EIT in cold atoms”