Monday Morning, January 7 2008

Plenary Session, George R. Welch, Chair

7:25 **George R. Welch**, *Texas A&M University*, Welcoming Remarks

7:30 **David Moncton**, *Massachusetts Institute of Technology*, "Integrating Laser and Linac Technology for Next Generation X-ray Sources"

8:00 **Robert H. Austin**, *Princeton University*, "Ratchets in Biology"

8:30 **Tamar Seideman**, *Northwestern University*, "New Directions in Nonadiabatic Alignment. From Ultrafast Switches to Guided Molecular Assembly"

	Emerging Areas in Synchrotron Radiation and X-Ray Physics David Moncton, Chair	*From glasses to biological motors* Robert H. Austin, Chair	*New Directions in Coherent Alignment* Tamar Seideman, Chair
9:10	**Esen E. Alp**, *Argonne National Laboratory*, "Lattice Dynamics of Nanoscale particles via Inelastic X-Ray Scattering"	*(Change:)* **Clare Yu**, *University of California at Irvine*, "The Transportation System Inside a Living Cell"	**Linda Young**, *Argonne National Laboratory*, "Control of x-ray processes using laser-aligned molecules"
9:30	**Ian Johnson**, *Paul Scherrer Institute*, "Coherent X-rays for Imaging and Dynamic Scattering"	*(Change:)* **Dean Astumiuan**, *University of Maine*, "Symmetry relations for trajectories of a Brownian Moleuclar Machine"	*(Change:)* **Stephane Guerin**, *University of Bourgogne*, "Optimizing field-free molecular alignment by designed laser pulses"
9:50	**Dean Chapman**, *University of Saskatchewan*, "Medical Imaging"	*(Change:)* **Erin Craig**, *University of Oregon*, "Model for myosin-V walking mechanism"	*(Change:)* **Margaret Murnane**, *University of Colorado at Boulder*, "Molecular Recollision Interferometry using High Harmonic Generation for Probing Molecular Structure and Dynamics"
10:10	**Marlan O. Scully**, *Texas A&M and Princeton University*, "XUV via coherent Raman superradiance 1: concepts and analysis"		

— Break —

Plenary Session, Robert W. Boyd, Chair

10:50 **Randall G. Hulet**, *Rice University*, "Experiments with Ultracold Atomic Fermions at the BEC-BCS Crossover"

11:20 **Peter Nordlander**, *Rice University*, "Plasmonic Nanostructures: Artificial molecules"

	Superradiance Marlan O. Scully, Chair	*Pairing of Ultracold Fermions* Randall G. Hulet, Chair	*Frontiers of Plasmonics* Peter Nordlander, Chair	*Novel Optics* Anatoly Svidzinsky, Chair
12:00	**Yuri Rostovtsev**, *Texas A&M University*, "XUV via coherent Raman superradiance 2: computational results"	**John Thomas**, *Duke University*, "Is a Strongly Interacting Fermi Gas a Perfect Fluid?"	**Javier Aizpurua**, *Donostia Intl. Phys. Ctr., Spain*, "Localised plasmons for resonant surface-enhanced spectroscopy"	**M. Howard Lee**, *University of Georgia*, "Birkhoff's theorem and Ergometer: A meeting of two cultures"
12:20	**Jun-Tao Chang**, *Texas A&M University*, "A new kind of cavity QED: superradiance from a large cloud"	**Kathy Levin**, *University of Chicago*, "Novel States of Matter in Ultracold Fermi Gases"	**Mark Stockman**, *Georgia State University*, "Ultrafast Controlled Nanoplasmonics"	**Leon Cohen**, *City University of New York (Hunter College)*, "Wave propagation in phase space"
12:40		**Erich J. Mueller**, *Cornell University*, "Probes of pairing in strongly interacting Fermi gases – what can we learn from spectroscopy?"	**Stefan Maier**, *Imperial College, London (UK)*, "Plasmonics throughout the spectrum: Sub-wavelength energy localization from the visible to the THz regime"	**Pat Loughlin**, *University of Pittsburgh*, "A Wigner approximation to wave propagation in a random medium"

Monday Evening, January 7 2008

Plenary Session, Randall G. Hulet, Chair

19:00 **Robert W. Boyd**, *University of Rochester,* "Advances in Slow and Fast Light"

19:30 **Claire Gmachl**, *Princeton University*, "Mid-Infrared Quantum Cascade Lasers"

20:00 **Alexei Sokolov**, *Texas A&M University,* "Toward sub-cycle field shaping by molecular modulation in gasses and solids: Raman coherence at work"

— Break —

	Slow and Fast Light Robert W. Boyd, Chair	*Quantum Cascade Lasers* Claire Gmachl, Chair	*Frontiers of Plasmonics* Mark Stockman, Chair	*Raman Technique for Ultrashort Pulses* Alexei Sokolov, Chair
20:50	**Paul Narum**, *The Norwegian Defence Research Establishment,* "Fast and slow light - What are the fundamental limitations and what does it actually mean?"	**Mikhail Belkin**, *Harvard University,* "Novel intersubband THz sources for operation above cryogenic temperatures"	**Naomi Halas**, *Rice University,* "Physics and applications at the 'hot' metal-molecule interface"	**Masayuki Katsuragawa**, *University of Electro- Communications, Japan,* "Octave-spanning Raman comb generation with absolute phase control"
21:10	**Daniel J. Gauthier**, *Duke University,* "Observation of Stored Light via Stimulated Brillouin Scattering"	**Alexey Belyanin**, *Texas A&M University,* "Mid/far-infrared photodetectors based on quantum coherence in coupled quantum wells"	**Gennady Shvets**, *University of Texas at Austin,* "Plasmonic Metamaterials: superlenses, hyperlenses, and negative index materials"	**Andy Kung**, *Academia Sinica, Taiwan,* "Recent progress in single-cycle to sub-cycle optical pulse generation by the Raman technique"
21:30	**John Howell**, *University of Rochester,* "Slow and Stopped Images"	**Weng W. Chow**, *Sandia National Laboratories,* "Quantum coherence in quantum cascade lasers: paths to THz generation and correlated photon emission"	**Norbert Kroó**, *Hungarian Academy of Sciences*, "Nonlinear Plasmonics"	
21:50	**George R. Welch**, *Texas A&M University,* "Subwavelength imaging via dark states"	**Gottfried Strasser**, *SUNY, University at Buffalo,* "Recent results on GaAs-based Quantum Cascade lasers"	**Lukas Novotny**, *University of Rochester,* "Enhancing light-matter interactions with optical antennas"	

Tuesday Morning, January 8 2008

Plenary Session, Vladimir M. Shalaev, Chair

7:30 **Federico Capasso**, *Harvard University,* "Harnessing quantum fluctuations: design, physics, and nanotechnology of Casimir forces and QED torques"

8:00 **Ofir E. Alon**, *Heidelberg University,* "Interacting Bose gases: Multi-orbital mean-field and beyond"

8:30 **John Pendry**, *Imperial College,* "Progress in Metamaterials - an Overview"

	Casimir Forces Federico Capasso, Chair	*Interacting Quantum Gases* Ofir E. Alon, Chair	*Metamaterials* John Pendry, Chair
9:10	**Gang Chen**, *Massachusetts Institute of Technology,* "Breakdown of Planck's Blackbody Radiation Law at Nanoscale"	**Caleb A. Christensen**, *Massachusetts Institute of Technology,* "Atom interferometry experiments with interacting Bose-Einstein condensates"	**Diego Dalvit**, *Los Alamos National Laboratory,* "Engineering Casimir forces with metamaterials"
9:30	**Markus Aspelmeier**, *Universität Wien,* "Laser-cooling and quantum entanglement of micromechanical systems"	**Ana Maria Rey**, *ITAMP,* "Cat state production with ultracold bosons in rotating ring superlattices"	**Vladimir Falko**, *Lancaster University,* "Analogy between p-n junction in graphene and optical metamaterials with negative refraction index"
9:50	**Jeremy Munday**, *Harvard University,* "Measurement of the Casimir force in fluids: from attraction to repulsion"	**David S. Weiss**, *Pennsylvania State University,* "Interacting atoms in optical lattices"	**Willie Padilla**, *Boston College,* "Metamaterials for Novel Devices"
10:10	**Giovanni Carugno**, *University of Padua,* "Dynamic Casimir effect: extracting light from vacuum"	**Yehuda B. Band**, *Ben-Gurion University,* "Interference with Bose-Einstein condensates"	

— Break —

Plenary Session, Edward S. Fry, Chair

10:50 **Bertrand Girard**, *LCAR - Université de Toulouse,* "Wave packet dynamics and interferences in atoms and molecules"

11:20 **Susanne Yelin**, *University of Connecticut,* "Negative index of refraction with atomic coherence"

	Novel Optics Philip Hemmer, Chair	*Wave Packets Dynamics* Bertrand Girard, Chair	*Metamaterials* Willie Padilla, Chair	*CARS* Yuri Rostovtsev, Chair
12:00	**Jim Franson**, *University of Maryland at Baltimore County,* "Beyond Bell's Inequality"	**Helen Fielding**, *University College, London,* "Setting the quantum clock: Localisation of Rydberg wave packets in H2"	**David Smith**, *Duke University,* "Inhomogeneous Metamaterials: From Gradient Index to Transformation Optics"	**Arthur Dogariu**, *Princeton University,* "Real-time Coherent Raman for biological applications"
12:20	**Yanhua Shih**, *University of Maryland at Baltimore County,* "The physics of ghost imaging"	**Kenji Ohmori**, *Institute for Molecular Sciences, Okazaki,* "Tailoring Picometric Quantum Carpets by Controlling Ultrafast Wave-Packet Interference"	**Igor Smolyaninov**, *University of Maryland,* "Novel nanophotonic devices based on plasmonic metamaterials"	**Hui Xia**, *Princeton University,* "Coherent excitation in Raman Spectroscopy"
12:40	**Herbert Winful**, *University of Michigan,* "A resolution of the tunneling time conundrum"	**Terry Mullins**, *Albert-Ludwigs-Universität Freiburg,* "Coherent transients in the photoassociation of ultracold atoms by femtosecond pulses"	**Martin Wegener**, *Universität Karlsruhe (TH),* "Recent Progress on Photonic Metamaterials"	**Dmitry Pestov**, *Texas A&M University,* "Ultrafast Coherent Raman Spectroscopy: Hybrid Technique and Its Applications"

Tuesday Evening, January 8 2008

Plenary Session, John Pendry, Chair

19:00 **Mikhail D. Lukin**, *Harvard University*, "Quantum optics meets nanoscience"

19:30 **Vladimir M. Shalaev**, *Purdue University*, "Controlling Light with Metamaterials"

20:00 **Dietrich Leibfried**, *NIST, Boulder*, "Quantum information processing with trapped atomic ions"

— Break —

	Diamond-based quantum optics Mikhail D. Lukin, Chair	*Quantum Information, Computation, and Communication* Howard Brandt, Chair	*Metamaterials* Vladimir M. Shalaev, Chair	*CARS* Arthur Dogariu, Chair
20:50	**Philip Hemmer**, *Texas A&M University*, "Sub-wavelength single-molecule imaging using quantum optics"	*(Change:)* **Haohua Wang**, *University of California at Santa Barbara*, "High fidelity gates in Josephson junction qubits"	**Nikolay Zheludev**, *The University of Southampton*, "Close mode resonances in photonic meta-materials"	**Svetlana Malinovskaya**, *Stevens Institute of Technology*, "Control of Raman transitions in CARS spectroscopy using chirped pulses (theory)"
21:10	**Neil Manson**, *Australian National University*, "Properties of the nitrogen-vacancy center color in diamond for quantum information processing"	**Mark Saffman**, *University of Wisconsin at Madison*, "Excitation and interaction of Rydberg atoms for quantum bits and quantum registers"	**Harry Atwater**, *California Institute of Technology*, "Coherency in Scattering at Slits and Grooves in Metallic Films: from Young's Double Slit Experiment to Solar Cells"	**Michael M. Kash**, *Lake Forest College*, "Pulse Catch-up in SOS"
21:30	**Jean-François Roch**, *ENS Cachon*, "Single color centers in nanodiamonds"	**Mark Eriksson**, *University of Wisconsin at Madison*, "Silicon quantum dots as quantum bits"	**Natasha Litchinitser**, *SUNY, Buffalo*, "From Positive- to Negative-Index Materials: Transitional Phenomena"	**Gombojov Ariunbold**, *Texas A&M University*, "Distributed Gain in SOS"
21:50		**Howard Brandt**, *Army Research Laboratory*, "Differential Geometry of Quantum Computation"	**Mikhail Noginov**, *Norfolk State University*, "Nanoplasmonics with gain: From low loss to lasing"	*(Change:)* **Deniz Yavuz**, *University of Wisconsin at Madison*, "Molecular modulation with continuous-wave laser beams"

Wednesday Morning, January 9 2008

Plenary Session, Frank A. Narducci, Chair

7:30 **Wolfgang Schleich**, *Universität Ulm,* "Factorization of numbers with classical and quantum interference"

8:00 **Mark Raizen**, *University of Texas at Austin,* "Comprehensive Control of Atomic and Molecular Motion"

8:30 **Gershon Kurizki**, *Weizmann Institute of Science, Israel,* "How far can we push the quantum - classical boundary"

	Number Theory and Quantum Mechanics Wolfgang Schleich, Chair	*Tests of Fundamental Physics* Mark Raizen, Chair	*New Developments in Decoherence Control* Gershon Kurizki, Chair
9:10	**Ernst Rasel**, *Universität Hannover,* "Gauss sum factorization with cold atoms"	**Dmitry Budker**, *University of California at Berkeley,* "Crossing the T (and P) and dotting the alpha – some fundamental-symmetry tests at Berkeley"	**Dongxia Ma**, *Texas A&M University,* "Bohr model with nearest atom quantization"
9:30	**Dieter Suter**, *Universität Dortmund,* "Factorizing numbers with the Gauss sum technique: NMR implementations"	**Gerald Gwinner**, *University of Manitoba,* "Towards studies of fundamental symmetries with francium atoms in an on-line laser trap"	**Alex Greilich**, *University of Dortmund,* "Ensemble effects of electron spins in self-assembled quantum dots"
9:50	**Béatrice Chatel**, *CNRS-Université Paul Sabatier-Toulouse III,* "Factoring numbers with ultrashort laser pulses"	**Ron Walsworth**, *Harvard-Smithsonian Center for Astrophysics,* "Astro-comb: revolutionizing precision spectroscopy in astrophysics"	**Christian Gross**, *University of Heidelberg,* "Entanglement in degenerate Bose gases"

— Break —

Plenary Session, Marlan O. Scully, Chair

10:30 **Lamb Award**, "The presentation of the 2007 Willis E. Lamb Award for Laser Science and Quantum Optics"

11:00 **Karl Krushelnick**, *University of Michigan,* "Compact Laser Plasma Accelerators"

	BEC experiment and theory Mark Havey, Chair	*Compact Laser Plasma Accelerators* Karl Krushelnick, Chair	*Metamaterials* Mikhail Noginov, Chair
11:40	**Laurent Sanchez-Palencia**, *Institut d'optique, Palaiseau,* "Anderson localization in interacting Bose gases"	**Eric Esarey**, *Lawrence Berkeley National Laboratory,* "GeV electrons from channel-guided laser wakefield accelerators"	**Ildar Gabitov**, *University of Arizona,* "Slow light in negative refractive index materials"
12:00	**Anatoly Svidzinsky**, *Texas A&M University,* "Hybrid approach to fluctuations in mesoscopic interacting Bose-Einstein condensate"	**Anatoly Maksimchuk**, *University of Michigan,* "High-energy electron acceleration in laser wakefields"	**Evgenii Narimanov**, *Purdue University,* "The Hyperlens: From Meta-Materials to Meta-Devices"
12:20	**Vitaly Kocharovsky**, *Texas A&M University,* "BEC: Beyond Gibbs and Wick Perturbation Theory"	**Warren Mori**, *University of California at Los Angeles,* "A path towards 10-100 GeV LWFA stages"	**Graeme Milton**, *University of Utah,* "Electromagnetic circuits"
12:40	**Moochan Kim**, *Texas A&M University,* "Master equations for quasiprobability function in BEC system"		**Nader Engheta**, *University of Pennsylvania,* "Metactronics: Metamaterial Nanocircuits and Wireless Elements at Nanoscales"

Wednesday Evening, January 9 2008

Plenary Session, Dmitry Budker, Chair

19:00 **Colin McKinstrie**, *Bell Laboratories, Alcatel-Lucent,* "Parametric processes in fiber-based devices and systems"

19:30 **Eric Mazur**, *Harvard University,* "Nonlinear optics at the nanoscale"

20:00 **Boris Altschuler**, *Columbia University,* "Optics of electric flows in graphene"

— Break —

	Quantum parametric processes in fibers Colin McKinstrie, Chair	*Disorder and Localization in Ultracold Atomic Gases - 1* Boris Altschuler, Chair	*Nanophotonics* Eric Mazur, Chair	*Novel Optics* Michael M. Kash, Chair
20:50	**Michael Vasilyev**, *University of Texas at Arlington,* "Phase-sensitive amplification in fibers"	**Mark Havey**, *Old Dominion University,* "Time-dependent light and atomic dynamics in high-density, ultra-cold atomic Rb vapor"	**Marko Loncar**, *Harvard University,* "Optomechanical interaction in nanophotonic devices"	**Nan Yu**, *NASA Jet Propultion Laboratory,* "Whispering gallery mode resonator thermal limits and stabilization"
21:10	**John Harvey**, *University of Auckland,* "Everything you always wanted to know about vector FWM in fibers"	*(Change:)* **Robin Kaiser**, *CNRS, France,* "Coherent wave transport and gain in a large cloud of cold atoms"	**David A. B. Miller**, *Stanford University,* "Fundamental limit to nanophotonic and slow light components"	**Geoffrey Duxbury**, *University of Strathclyde, Glasgow,* "Propagation of chirped infrared QC laser pulses through an optically thick minimally damped gas: delayed rapid passage signals in the 8 micron spectrum of acetylene"
21:30	**Alan Migdall**, *NIST Gaithersburg,* "Fiber-based source of photon pairs"	*(Change:)* **Silke Ospelkaus**, *JILA, UC Boulder, and University of Hamburg,* "Fermi-Bose-Mixtures in 3D Optical Lattices"	**Kohzo Hakuta**, *University of Electro-Communications, Japan,* "Single Atoms on an Optical Nanofiber"	**Vladimir A. Sautenkov**, *Texas A&M University,* "Control of electromagnetically induced transparency by field phase"
21:50	**Alfred U'Ren**, *CICESE,* "Tailored photon-pair generation in fibers"		**Domenico Pacifici**, *California Institute of Technology,* "Plasmons in slit and hole arrays: implications of coherence and short range order for modulators and solar cells"	

Thursday Morning, January 10 2008

Plenary Session, Ofir E. Alon, Chair

7:30 **Michel Devoret**, *Yale University,* "Circuit QED : superconducting atoms" in microwave resonators"

8:00 **Olga Kocharovskaya**, *Texas A&M University,* "Atomic and Nuclear Coherence Effects in Solids"

8:30 **Vladislav Yakovlev**, *University of Wisconsin at Milwaukee,* "Probing biochemical interactions in microfluidic devices using nonlinear optical spectroscopy"

	Quantum Coherence Effects Olga Kocharovskaya, Chair	*Disorder and Localization in Ultracold Atomic Gases - 2* Michel Devoret, Chair	*Biochemical applications of Nonlinear optical spectroscopy* Vladislav Yakovlev, Chair	*Novel Optics* Vladimir A. Sautenkov, Chair
9:10	**Takashi Nakajima**, *Kyoto University,* "Phase- and chirp-dependent excitation and ionization"	**Eric Akkermans**, *The Technion, Israel and Yale University, USA,* "Photon localization and Dicke superradiance in atomic gases: crossover to a 'small world' network"	**Vladimir A. Lobastov**, *California Institute of Technology,* "Ultrafast structural dynamics with electron microscopy"	**Leonid Butov**, *University of California at San Diego,* "Control of Excitons"
9:30	**Robin Santra**, *Argonne National Laboratory,* "Strong-field control of x-ray absorption"	**Azriel Genack**, *City College of New York,* "Modes and the statistics of dynamics and speckle evolution"	**Vadim V. Lozovoy**, *Michigan State University,* "Single beam CARS with pseudorandom phase modulated femtosecond pulses"	**Zoe-Elizabeth Sariyanni**, *University of California at Irvine,* "Applications of Femtosecond Coherent Raman Spectroscopy"
9:50	**Stephen A. Lyon**, *Princeton University,* "Enhancing coherence of semiconductor-based quantum bits"	**Peter Rabl**, *Harvard University,* "Hybrid Quantum Computing with Polar Molecules"	**Feruz Ganikhanov**, *West Virginia University,* "High sensitivity vibrational imaging with broadly tunable lasers"	**Anatoliy Savchenkov**, *OEwaves, Inc.,* "Frequency references based on four-wave mixing in crystals"
10:10	**James Higbie**, *University of California at Berkeley,* "New Directions in Magnetometry using Nonlinear Magneto-optical Rotation"	**Philippe Jacquod**, *University of Arizona,* "Capturing quantum coherence with classical mechanics: The semiclassical approach to mesoscopic physics"	**Szymon Suckewer**, *Princeton University,* "Femtosecond Laser for Eye Surgery"	

— Break —

Plenary Session, Colin McKinstrie, Chair

10:50 **Henry C. Kapteyn**, *University of Colorado at Boulder,* "Probing molecular dynamics using ultrafast x-rays"

11:20 **Jonathan P. Dowling**, *Lousiana State University,* "Quantum Sensors: The Low Down on High NOON"

	Quantum Coherence Effects Stephen A. Lyon, Chair	*Quantum Optical Interferometric Sensors* Jonathan P. Dowling, Chair	*Ultrafast X-ray Dynamics* Henry C. Kapteyn, Chair	*Novel Optics* Zoe-Elizabeth Sariyanni, Chair
12:00	**Selim Shahriar**, *Northwestern University,* "A Fast-Light Augmented Zero-Area Active Sagnac Interferometer for Enhanced Strain Sensitivity AC-Coupled Gravitational Wave Detection"	**Hwang Lee**, *Lousiana State University,* "Sub-Shot Noise Optical Interferometry"	**Matteo Rini**, *Lawrence Berkeley Lab,* "Ultrafast Studies of Phase Transition Dynamics in Correlated Electron Systems"	**Eric W. Van Stryland**, *CREOL & FPCE, University of Central Florida,* "White-Light Continuum Z-scan Nonlinear Optical Spectroscopy"
12:20	**Petr Anisimov**, *Texas A&M University,* "Dressed state analysis of refractive index enhancement in Raman system – Upper limit estimate"	**Gerald Gilbert**, *MITRE,* "Aspects of Practical Remote Quantum Sensing"	**Kenichi Ishikawa**, *The University of Tokyo,* "Wavelength-dependence of high-harmonic generation"	**Nikolai Stelmakh**, *University of Texas at Arlington,* "Spatial mode multiplexing of lasers beams"
12:40	**Elizabeth Donley**, *NIST - Boulder,* "Nuclear Magnetic Resonance Gyroscope"	**Christopher C. Gerry**, *Lehman College, CUNY,* "Heisenberg Limited Measurements with Coherent States and Weak Kerr Nonlinearities"	**Thomas Pfeifer**, *University of California at Berkeley, and LBNL,* "Sub-cycle ionization gating of high-harmonics and attosecond XUV spectral interferometry"	**Konstantin Vodopyanov**, *Stanford University,* "New Light from GaAs"

Thursday Evening, January 10 2008

Plenary Session, Jonathan P. Dowling, Chair

19:00 **Jack Harris**, *Yale University,* "Strong dispersive coupling of an optical cavity to a micromechanical resonator"

19:30 **James Gord**, *Wright-Patterson Air Force Base,* "Propulsion Applications of Femtosecond Sensing"

20:00 **Jason Fleischer**, *Princeton University,* "Optical hydrodynamics"

— Break —

	Mechanical Oscillators Jack Harris, Chair	*Femtosecond and Quantum Optical Sensors* James Gord, Chair	*Quantum and Optical Hydrodynamics* Jason Fleischer, Chair
20:50	**Florian Marquardt**, *Ludwig-Maximilians-Universität, Munich,* "Quantum theory of optomechanical cooling"	**Robert P. Lucht**, *Purdue University,* "Theory of Femtosecond CARS for Single-Laser-Shot, High-Rep-Rate Gas-Phase Measurements"	**Peter Engels**, *Washington State University,* "Quantum hydrodynamics in BECs: From soundwaves to quantum shock"
21:10	**Kater Murch**, [Title Not Entered]	**Robert J. Levis**, *Temple University,* "Ultrafast, Laser-Generated Filament Plasma-Dynamics as Probed by Femtosecond Box-CARS"	**Mankei Tsang**, *California Institute of Technology,* "Wave, Particle, and Fluid Properties of light"
21:30	**Pierre-François Cohadon**, *Laboratoire Kastler Brossel,* "Experimental optomechanics with silica and silicon mirrors"	**Anil Patnaik**, *Wright-Patterson Air Force Base,* "Coherent repumping assisted immunity of Raman coherence to rapid collisional decays"	**Hrvoje Buljan**, *University of Zagreb, Croatia,* "Nonequilibrium dynamics of 1D Bose gases within the Lieb-Liniger and Tonks-Girardeau models"
21:50		**Frank A. Narducci**, *Naval Air Systems Command,* "Progress towards an atom interferometer gradient magnetometer"	