

Spring 2008

Prizes & Awards

APS Announces Spring 2008 Prize and Award Recipients

Thirty-five prizes and awards will be presented during special sessions at three spring meetings of the Society: the 2008 March Meeting, March 10-14, in New Orleans, LA, the 2008 April Meeting, April 12-15, in St. Louis, MO, and the 2008 Atomic, Molecular and Optical Physics Meeting, May 27-31, in State College, PA.

Citations and biographical information for each recipient follow. The Apker Award recipients appeared in the December 2007 issue of *APS News* (http://www.aps.org/programs/honors/awards/apker.cfm).

Additional biographical information and appropriate web links can be found at the APS website (http://www.aps.org/programs/honors/index.cfm). Nominations for most of next year's prizes and awards are now being accepted. For details, see page 8 of this insert.

PRIZES

Will Allis Prize for the Study of Ionized Gases

Kenneth Kulander

Lawrence Livermore National Laboratory

Citation: "For the development of time-dependent methods and models that have advanced our understanding of strong field ionization processes in rapidly ionizing gases."

Kenneth Kulander received his PhD in physical chemistry from the University of Minnesota in 1972. In 1978 Kulander joined the Theoretical Atomic and Molecular Group at the Lawrence Livermore National Laboratory. He became the leader of that



group in 1986, and remained so until his retirement in 2001. Kulander's research has focused on developing and exploiting methods to study the time-dependent quantum dynamics of atoms and molecules, either during collision processes or when subjected to ultrashort, intense laser pulses. Among the processes studied have been electron-atom and ion-atom collisions, molecular photodissociation, collision induced dissociation, and dissociative recombination. Recently Kulander has pursued a variety of strong field, multiphoton processes in atoms and molecules.

Hans A. Bethe Prize

Friedrich K. Thielemann

University of Basel

Citation: "For his many outstanding theoretical contributions to the understanding of nucleosynthesis, stellar evolution and stellar explosions through applications to individual objects and to cosmic chemical evolution."

Friedrich-Karl (Friedel) Thielemann, received his PhD for nuclear reaction rate studies and their

astrophysical application in explosive burning as a student of W. Hillebrandt and E. R. Hilf (Max Planck Institute for Astrophysics, Garching and TUD) in 1980. He held postdoctoral positions at the University of Chicago, the California Institute



of Technology, the Max Planck Institute for Nuclear Physics, the Max Planck Institute for Astrophysics and the University of Illinois. In 1986 he joined the faculty of Harvard University (Harvard-Smithsonian Center for Astrophysics and Harvard Observatory) and in 1994 accepted a full professorship at the University of Basel. His research covers theoretical and computational astrophysics as well as the subatomic processes that enter the modeling of hot and dense astrophysical plasmas.

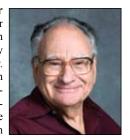
Tom W. Bonner Prize in Nuclear Physics

Arthur M. Poskanzer

Lawrence Berkeley National Laboratory

Citation: "In recognition of his pioneering role in the experimental studies of flow in Relativistic Heavy Ion Collisions"

Arthur Poskanzer
is Distinguished Senior
Scientist Emeritus with
the Lawrence Berkeley
National Laboratory.
Poskanzer is a pioneer in
the field of relativistic nuclear collisions and a codiscoverer of collective
flow, the phenomenon
in which nuclear matter,



compressed to a state of high temperature and density, exhibits a fluidic motion. Poskanzer earned his PhD in physical chemistry from MIT. After working for nine years at Brookhaven National Laboratory, he joined the Berkeley Lab staff in 1966. Poskanzer was the first scientific director of the Bevalac accelerator, one of the leading organizers behind SPS heavy ion program at CERN, and the co-founder of the STAR collaboration at the Relativistic Heavy Ion Collider (RHIC). He was also a co-discoverer of elliptic flow at RHIC, which has proved to be major experimental evidence for the existence of the quark-gluon plasma. He continues today as a member of the STAR collaboration working on methods of data analysis for elliptic flow.

Oliver E. Buckley Condensed Matter Physics Prize

Mildred Dresselhaus

Massachusetts Institute of Technology

Citation: "For pioneering contributions to the understanding of electronic properties of materials, especially novel forms of carbon."

Mildred Dresselhaus has a PhD from the Uni-

versity of Chicago (1958). After an NSF postdoctoral fellowship at Cornell University, she became a staff member at the MIT Lincoln Laboratory (1960). In 1968 she became an MIT faculty member. While at Lincoln Laboratory she studied the electronic properties



of semiconductors and extended magneto-optic techniques to study the electronic structure of a variety of semimetals. Her success with Gene Dresselhaus in illuminating the electronic structure and Fermi surface of graphite led to explorations of graphite intercalation compounds where single graphene layers sandwiched between guest species could be explored within the context of low dimensional physics. Further study of carbon fibers and liquid carbon led her early entry into studies on fullerenes and carbon nanotubes as these fields were emerging. Her studies illuminated the unique electronic structure of carbon nanotubes and the use of spectroscopy to probe the geometric structure of individual nanotubes.

Davisson-Germer Prize in Atomic or Surface Physics

Horst Schmidt-Böcking

University of Frankfurt

Citation: "For the invention of the COLTRIMS technique and his many contributions to AMO physics."

Biography unavailable at press time

Max Delbruck Prize in Biological Physics

Steven M. Block

Stanford University

Citation: "For his originality in the direct measurement of forces and motions in single biomolecular complexes undergoing the nucleoside triphosphate hydrolysis reactions that drive intracellular transport, cell motility, and DNA and RNA replication."

Steven M. Block earned Hon. BA and MA degrees in physics at Oxford University (1974;1978), a master's in biology at the University of Colorado (1982); and a PhD in biophysics at Caltech (1983).

He served as staff scientist at the Rowland Institute for Science in Cambridge, and Lecturer at Harvard University (1987-1993), then Professor of molecular biology at Princeton University (1994-1999), before joining Stanford University (1999-present). Block's



research lies at the interface of physics and biology, particularly in the study of molecular motors, such as kinesin and RNA polymerase. His laboratory has pioneered the use of laser-based optical traps, also called "optical tweezers," to study the nanoscale motions of individual biomolecules.

Fluid Dynamics Prize (2007)

Guenter Ahlers

University of California, Santa Barbara

Citation: "For pioneering experimental work on fluid instabilities, low-dimensional chaos, pattern formation, and turbulent Rayleigh-Benard convection."

Guenter Ahlers received his PhD. in physical chemistry from the University of California at Berkeley in 1963 and then became a member of the technical staff at Bell Laboratories. Then he worked on critical phenomena and on superfluid hydrodynamics. In 1970



he began research on Rayleigh-Benard convection in liquid helium that led to the experimental observation of chaos in a fluid-mechanical system. In 1979 Ahlers became a Professor of Physics at UCSB where he studied pattern formation in convection and Taylorvortex flow, and turbulent Rayleigh-Benard convection.

Dannie Heineman Prize for Mathematical Physics

Mitchell Feigenbaum Rockefeller University

Citation: "For developing the theory of deterministic chaos, especially the universal character of period doubling, and for the profound influence of these discoveries on our understanding of nonlinear phenomena in physics."

Mitchell Feigenbaum received a PhD in theoret-

ical high energy physics at MIT in 1970. He was a research associate at Cornell, 1970-72, and at Virginia Polytechnic Institute, 1972-74; a staff member at Los Alamos, 1974-82; Professor of Physics at Cornell, 1982-86; and Toyota Professor at Rockefeller Universi-



ty 1986-present, and since 1996, Director of the Center for Studies in Physics and Biology. Feigenbaum's most widely known work is in nonlinear dynamics. His unanticipated discovery of the scaling theory of the "onset of chaos" spawned new directions in mathematics and moved dynamical systems into the world of physics. His more recent work includes research on fluids and various studies of vision. During the 1990s he worked on cartography, including the first implementation of Chebychev projections.

Frank Isakson Prize for Optical Effects in Solids

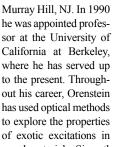
Joseph Orenstein

University of California, Berkeley

Zeev Valentine Vardeny University of Utah

Citation: "For pioneering contributions to the understanding of optical phenomena in complex materials including conducting polymers, semiconductors, and high temperature superconductors."

Joseph Orenstein received his physics education at the Massachusetts Institute of Technology, earning a B.S. in 1974 and PhD in 1980. He worked through the 1980s on the research staff of Bell Laboratories in





novel materials. Since then he has used a wide variety of time-resolved optical techniques to investigate solitons, polarons, and triplet excitons in conducting polymers, d-wave quasiparticles in high-T_c superconductors, and spin polarization waves in semiconductors. Currently his research focuses on electric field control of electron spin in semiconductors and multiferroic materials.

Zeev Valentine Vardeny is Distinguished Pro-

fessor of Physics at the University of Utah. He received his B.S. (1969) and PhD (1979) in physics from the Technion, Haifa, Israel. His research interests include optical, electrical and magnetic properties of organic semiconductors:



fabrication of organic optoelectronic and spintronics devices; laser action and transient spectroscopy of organic semiconductors, amorphous semiconductors, nanotubes, and fullerenes; fabrication and properties of 2D and 3D dielectric, metallo-dielectric and metallic photonic crystals and plasmonic lattices.

Julius Edgar Lilienfeld Prize

H. Eugene Stanley
Boston University

Citation: "For contributions to the deeper understanding of phase transitions and critical phenomena in complex systems; and for excellence in communicating the excitement of interdisciplinary research to a wide range of audiences."

H. Eugene Stanley was awarded a PhD in phys-

ics at Harvard in 1967. Stanley was a Miller Fellow at Berkeley with C. Kittel from 1968 to 1969. From 1969 to 1976 he was a professor in the physics department at MIT. In 1976 Stanley joined Boston University as a professor



in the physics department and the School of Medicine's physiology department. In 2007 he was given joint appointments with the chemistry and biomedical engineering departments. Stanley's main focus is understanding the anomalous behavior of liquid water in bulk, nanoconfined, and biological environments. He has also worked on a range of other topics in complex systems, such as quantifying correlations among the constituents of the Alzheimer brain, and quantifying fluctuations in noncoding and coding DNA sequences, and interbeat intervals of the healthy and diseased heart.

James Clerk Maxwell Prize for Plasma Physics (2007)

John Lindl

Lawrence Livermore National Laboratory

Citation: "For 30 years of continuous plasma physics contributions in high energy density physics and inertial confinement fusion research and scientific management."

John Lindl is currently the Chief Scientist for the National Ignition Facility Programs Directorate at Lawrence Livermore National Laboratory, where he works with the major participants in the NNSA

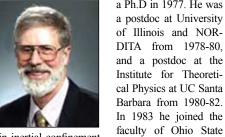
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Nominations for 2009
Prizes and Awards

stewardship program to develop a national plan for ignition on NIF. Lindl received his PhD in astrophysics from Princeton University in 1972. He joined Lawrence Livermore National Laboratory in 1972, concentrating on



fluid instabilities and high gain inertial confinement fusion (ICF) targets. Lindl's work in ICF has spanned a wide range of topics including high gain target designs for lasers and particle beams, hydrodynamic instabilities in ICF, implosion symmetry and hohlraum design, high energy electron production and plasma evolution in hohlraums, and the physics of compression and ignition.

James C. McGroddy Prize for New Materials

Jun Akimitsu

Aoyama-Gakuin University

Robert C. Haddon University of California, Riverside

> Arthur F. Hebard University of Florida

Citation: "For the discovery of high temperature superconductivity in non-oxide systems.

Jun Akimitsu received a PhD from the University of Tokyo in 1970. From 1970 to 1976 Akimitsu was a Research Associate at the Institute for Solid State Physics at the University of Tokyo. Since 1982 he has been



a professor at Aoyama-Gakuin University. Akimitsu opened up a new chapter of "superconductivity fever" by announcing his surprising discovery of superconductivity in MgB₂ (T_c=39K) at the beginning of the 21st century. Since the discovery of MgB2, he has found over 10 superconductors in non-oxide systems including the unexpectedly high- $^{\text{T}}$ c superconductor Y₂C₃ (T₂=18K). Recently, he discovered superconductivity in B-doped SiC, which can be described as a type-I superconductor.

Robert Haddon obtained a B.Sc. (Hon.) degree at Melbourne University, and an organic chemistry PhD from Pennsylvania State University in 1971. He was a Queen Elizabeth II Fellow at the Australian National University,



and in 1976 he joined Bell Telephone Laboratories. In 1997 he was appointed Professor of Chemistry and Physics at the University of Kentucky, and in 1998 he became Director of the NSF Advanced Carbon Materials Center. He has co-founded two companies that produce and process single-walled carbon nanotubes (SWNTs). In 2000, he became a professor at the University of California, Riverside. His research interests are in the electronic structure and properties of molecules and materials, with particular emphasis on transport, magnetism, and superconductivity.

Arthur F. Hebard received his PhD from Stanford University in 1971. In 1972 Hebard became a Member of Technical Staff at AT&T Bell Telephone Laboratories where he specialized in research on thin-film superconductors. His collaborative



paper titled "Superconductivity at 18K in potassiumdoped C_{60} " by Hebard et al. [*Nature*, 350, 600(1991)] was listed by the Institute for Scientific Information (ISI) in Science Watch as the research paper most frequently cited in 1991. In 1996 Hebard moved to the University of Florida where he is currently a distinguished Professor of Physics specializing in the study of magnetism in thin films and at thin film interfaces of complex oxides and semiconductors.

Lars Onsager Prize

Tin-Lun Ho Ohio State University

Gordon Baym University of Illinois

Christopher Pethick NORDITA

Citation: "For his contributions to quantum liquids and dilute quantum gases, both multi-component and rapidly rotating, and for his leadership in unifying condensed matter and atomic physics research in this area.

Tin-Lun Ho graduated from Chung Chi College, Chinese University of Hong Kong in 1972. He attended the University of Minnesota in 1972-73. He transferred to Cornell University in 1973 and received a Ph.D in 1977. He was a postdoc at University of Illinois and NOR-DITA from 1978-80. and a postdoc at the Institute for Theoretical Physics at UC Santa Barbara from 1980-82. In 1983 he joined the



University. He has contributed to a variety of areas in condensed matter physics, including quantum liquid, quasicrystals, and quantum Hall effect. His early work on superfluid He-3 is among the earliest applications of topological ideas in condensed matter. In the last decade, he has been working on a wide range of problems in dilute quantum gases, and fostering communications between condensed matter physics and atomic physics communities. He is also known as Jason Ho among his friends.

Citation: "For fundamental applications of statistical physics to quantum fluids, including Fermi liquid theory and ground-state properties of dilute quantum gases, and for bringing a conceptual unity to these areas."

Gordon Baym received his PhD in physics from Harvard in 1960. After a two year postdoc at the now Niels Bohr Institute in Copenhagen (where he is currently an Adjunct Professor), and a year at the University of



California, Berkeley, he came to the University of Illinois in 1963. His research spans condensed matter and statistical physics, including quantum fluids, Bose-Einstein condensation in atomic vapors, astrophysics, nuclear physics, and the history of physics. He is a pioneer in the study of matter under extreme conditions of density and pressure and a leader in the conception of the Brookhaven Relativistic Heavy Ion Collider (RHIC).

Christopher Pethick was educated at the Univer-

sity of Oxford, where he received his D. Phil. in 1965 for work on liquid helium 4. He held postdoctoral appointments at Oxford and at the University of Illinois, and in 1970 he joined the faculty at Illinois. In 1973 he became Professor of Physics at Nor-



dita, while maintaining his strong connections with the University of Illinois. He was director of Nordita from 1989-1994. He has contributed to diverse fields of physics, especially the properties of quantum liquids, both normal and superfluid, and the properties of dense matter and neutron stars. For the past decade, his main research interest has been the physics of atomic quantum gases and Bose-Einstein condensa-

Abraham Pais Prize for History of Physics

Gerald Holton

Harvard University

Citation: "For his pioneering work in the history of physics, especially on Einstein and relativity. His writing, lecturing, and leadership of major educational projects introduced history of physics to a mass

Gerald Holton is Mallinckrodt Research Professor of Physics and Research Professor of History of Science at Harvard University. He served as President of the History of Science Society Vice President of the International History of Science Society,



and on several U.S. National Commissions. His undergraduate degrees came from the City of Oxford School of Technology and from Wesleyan University; his PhD is from Harvard University (1948). His book publications include Thematic Origins of Scientific Thought: Kepler to Einstein; Science and Anti-Science; The Scientific Imagination; Einstein, History, and Other Passions; Victory and Vexation in Science: Einstein, Bohr, Heisenberg and Others; and, with Gerhard Sonnert, two books on the careers of women scientists. He was the founding editor of the quarterly journal Daedalus and of Science, Society and Human Values, and was member of the Editorial Committee of the Collected Papers of Albert Einstein.

George E. Pake Prize

Julia M. Phillips

Sandia National Laboratories

Citation: "For her leadership and pioneering research in materials physics for industrial and national security applications."

Julia M. Phillips is Director of the Physical, Chemical, and Nano Sciences Center at Sandia National Laboratories (since 2001). She concurrently

served as the Director of the Center for Inte-Nanotechnologies (CINT) during 2005-2007. She came to Sandia in 1995 after 14 years at AT&T Bell Laboratories. She has a PhD in applied physics from Yale University



and a B.S. in physics from the College of William and Mary. Her research has been in the areas of epitaxial metallic and insulating films on semiconductors, high temperature superconducting, ferroelectric, and magnetic oxide thin films, and novel transparent conducing materials. Phillips is chair of the APS Division of Condensed Matter Physics and a past president of the Materials Research Society.

W.K.H. Panofsky Prize in **Experimental Particle Physics**

George Cassiday University of Utah

Pierre Sokolsky University of Utah

Citation: "For the pioneering development of the atmospheric fluorescence technique as a method for exploring the highest energy cosmic rays.'

George Cassiday received his PhD in 1968 from Cornell University. Since 1970 he has been a professor at the University of Utah. Cassiday developed the 2nd generation large tank Cherenkov light detectors deployed in the deep underground



Utah Neutrino detector. He also built a cosmic rav telescope that was used to measure the bulk density of 2000 feet of mountainous rock overburden of the Utah neutrino detector. Cassiday designed and built the world's first working air fluorescence cosmic ray detector that conclusively demonstrated the feasibility of the technique. He designed and built the first operating all sky air fluorescence detector, "The Fly's Eye" in the western Utah desert at Dugway Proving grounds. The world's highest energy cosmic ray was subsequently detected by this detector

Pierre Sokolsky, a professor of physics at the University of Utah, was named dean of the College of Science in 2007. Sokolsky earned a PhD in 1973 at the University of Illinois. Sokolsky joined the University of Utah physics faculty in 1981. In 2004,



Sokolsky spearheaded the university's \$17 million Telescope Array project located just west of Delta, Utah, to study ultrahigh-energy cosmic rays in a collaboration with scientists from several universities. Sokolsky also launched a comprehensive astronomy research program at the University of Utah, including undergraduate and graduate degrees in astronomy.

Earle K. Plyler Prize for Molecular Spectroscopy

Steven G. Boxer

Stanford University

Citation: "For his creation of the new spectroscopic technique of vibrational Stark spectroscopy, and its insightful applications to a variety of condensed phase systems, including the bacterial photosynthetic reaction center.'

Steven G. Boxer is the Camille and Henry Dreyfus Professor in the department of chemistry at Stanford University. He received his PhD from the University of Chicago in 1976. His research interests are at the interface of physical chemistry, biology and engineering. Topics of current interest include: electron and energy transfer mechanisms in photosynthesis, electrostatics and dynamics in proteins, Stark spectroscopy, the fabrication of artificial systems to simulate, manipulate and image biological membranes and their interactions, and the excited state dynamics of green fluorescent protein.

Polymer Physics Prize

Kenneth S. Schweizer University of Illinois

Citation: "For outstanding theoretical contributions to the fundamental understanding of structure and dynamics in polymer melts, polymer blends, polymer-particle composites, and glasses.

Kenneth S. Schweizer received his PhD in physics in 1981 from the University of Illinois at Urbana-

Champaign (UIUC). After a postdoc at AT&T Bell Laboratories he ioined Sandia National Laboratories. In 1991 he moved to UIUC where he is presently the G. Ronald and Margaret H. Morris Professor. His research interests are



centered on developing and applying microscopic statistical mechanical theories of the structure, thermodynamics and dynamics of soft materials including polymers, colloids, nanocomposites and other complex fluids in the suspension, liquid, rubbery, gel and glass states.

Aneesur Rahman Prize for Computational Physics

Gary S. Grest

Sandia National Laboratories

Citation: "For ground-breaking development of computational methods and their application to the study of soft materials, including polymers, colloids, and granular systems."

Gary Grest received his PhD in 1974 in physics from Louisiana State University. Following postdoctoral positions at Rutgers University and the University of Chicago he joined the faculty of physics at Purdue University in 1979. In 1981 Grest was invited



to join Exxon's Corporate Research Laboratories. Since 1998 Grest has been a Distinguished Member of the Technical Staff at Sandia National Laboratories. His research in condensed matter physics includes the studies of structure and dynamics of polymers and complex fluids, granular materials, emulsions and colloids. A hallmark of his work has been identifying the time and length scales which are most significant in the physical systems and matching them to those accessible by numerical simulation.

Andrei Sakharov Prize

Liangying Xu

Chinese Academy of Sciences

Citation: "For a lifetime's advocacy of truth, democracy and human rights-despite surveillance and house arrest, harassment and threats, even banishment -through his writings, and publicly speaking his

Biography unavailable at press time.

J.J. Sakurai Prize for **Theoretical Particle Physics**

Stanislav Mikheyev Russian Academy of Sciences

Alexei Smirnov The Abdus Salam ICTP

Citation: "For pioneering and influential work on the enhancement of neutrino oscillations in matter, which is essential to a quantitative understanding of the solar neutrino flux.

Stanislav Mikhevev graduated from Moscow State University in 1965. He then became a researcher at Lebedev Physical Institute. Since 1970 he has been a researcher at the Institute for Nuclear Research of



the Russian Academy of Sciences. He has been the leader of two experiments carried out on Baksan Telescope: observation of upward-going muons and searches for superheavy magnetic monopoles. He earned his PhD in physics from the Institute for Nuclear Research in 1983. In 1985 Mikheyev and A. Smirnov considered the propagation of oscillating neutrinos in matter with varying density and suggested an explanation for the solar neutrino problem (the MSW effect). His current activities are related to the Baksan Neutrino Observatory, the Baikal Neutrino Telescope, and the T2K experiment.

Alexei Smirnov raduated from Moscow State University in 1974. In 1977 he began working at the Institute for Nuclear Research (INR) of the Academy of Sciences of the USSR, where he received his PhD in 1979. Smirnov joined the International



Centre for Theoretical Physics, ICTP (Trieste, Italy) in 1992 while continuing his affiliation with INR (Moscow). He became a staff member with ICTP in 1997. In 1984-1985, following earlier work by Lincoln Wolfenstein, Smirnov, together with Stanislav Mikheyev, uncovered effects of resonance enhancement of neutrino oscillations in matter and the adiabatic conversion in non-uniform media (the MSWeffect). Currently Smirnov is working on implications of neutrino results for fundamental physics as well as on future programs of studies in neutrino physics.

> **Arthur L. Schawlow Prize** in Laser Science

> > James C. Bergquist NIST

Citation: "For his contributions to laser science

and tests of fundamental physical principles, in particular the application of ultra-stable lasers to tests of quantum measurement theory and the fundamentals of quantum mechanics."

James C. Bergquist received a bachelor's degree from the University of Notre Dame in 1970 and a PhD from the University of Colorado in 1977. After an NRC postdoctoral appointment with David Wineland, he joined his



research group at NIST in Boulder. In his research, Bergquist has concentrated on the laser cooling and spectroscopy of trapped atomic ions with applications to atomic clocks and fundamental tests. In 2000, he and his colleagues at NIST demonstrated the world's first optical clock based on a single laser-cooled mer-

Prize for a Faculty member for Research in an Undergraduate Institution

Michael R. Brown Swarthmore College

Citation: "For his outstanding contributions to plasma physics made possible by his development of a world-class spheromak laboratory at Swarthmore College, and for his energetic mentoring of undergraduate students.'

Michael Brown is a professor of physics at Swarthmore College. Brown's work in plasma physics has focused on fundamental astrophysical processes accessible in laboratory experiments and innovative schemes for magnetic confinement



fusion. Brown has established the Swarthmore Spheromak Experiment (SSX) at Swarthmore College with the assistance of 16 senior honors students and over \$2.5M in grants from the Department of Energy and National Science Foundation. He received his PhD in physics from Dartmouth in 1987. He was a senior research fellow at Caltech before joining the Swarthmore faculty in 1994.

Robert R. Wilson Prize for **Achievement in the Physics of Particle Accelerators**

Lyndon R. Evans CERN

Citation: "For sustained career of technical innovation and leadership in the SPS protonantiproton collider, culminating in the construction and commissioning of the LHC.

Evans Lyndon earned a B.Sc in 1966 and a PhD in 1970, both from the University of Wales. Evans was a CERN Research Fellow from 1970-1971. He worked on the 300 GeV project from 1971 to 1976, and the Ppbar project



from 1978 to 1984. He was Deputy Division Leader SPS division (1988-1989,) Division Leader SL (SPS-LEP) Division (1990-1993), Associate Director of Future Accelerators (1993-1994) and Large Hadron Collider Project Leader 1994-present. His interests include beam dynamics and accelerator project management and commissioning. He has worked on construction and commissioning of the Large Hadron Collider.

AWARDS, MEDALSHIPS & LECTURESHIPS

David Adler Lectureship Award in the Field of Materials Physics

Karin Rabe

Rutgers University

Citation: "For research, writings and presentations on the theory of structural phase transitions and for the application of first-principles electronic structure methods to the understanding of technologically important phenomena in ferroelectrics.

Karin Rabe received her PhD in physics from MIT (1987). Following two postdoctoral years at AT&T Bell Laboratories, she joined Yale University, and then moved to the Rutgers in 2000. She has published more than



100 papers in the theoretical analysis and prediction of the properties of materials. Her main interests are in the application of first-principles methods to the study of systems at or near structural phase transitions, including ferroelectrics, piezoelectrics, high-k dielectrics, multiferroics and shape-memory compounds. Recently she has focused on the effects of epitaxial strain and interfaces in thin films and superlattices. She is co-editor of the book *Physics of Ferroelectrics:* a Modern Perspective, published in 2007.

LeRoy Apker Award PhD

Matthew R. Becker University of Michigan

Non-PhD

Bryce R. Gadway Colgate University

Citation: "The Velocity Structure of MAXBCG Galaxy Clusters from the Sloan Digital Sky Survey.'

Matthew Becker received his B.S. in physics and mathematics from the University of Michigan in 2007 with Highest Distinction. Under Professor Timothy McKay, he conducted his senior thesis research on the



dynamics of galaxy clusters in the Sloan Digital Sky Survey. At the University of Michigan, he was inducted into Phi Beta Kappa, won the William L. Williams award for the most outstanding undergraduate thesis, received a Barry M. Goldwater Scholarship, and was a Michigan Space Grant Consortium Undergraduate Fellow. He is currently a graduate student at the University of Chicago as a GAANN fellow pursing his PhD in astrophysics and cosmology.

Citation: "Creation and Measurement of a Single-Proton Two-Qubit State to Test a Bell-Kochen-Specker Inequality.

Bryce Gadway's senior-year research examined the creation of single-particle entangled states and their application for testing Hidden-Variable Theorems. Specifically, he created an ensemble of single photons entan-



gled in their polarization and direction of momentum. These photons were used to test theories of nature based on Non-Contextual Realism (i.e. Non-Contextual Hidden-Variable Theorems), which assumes that a system's observables have real values that are independent of the context of measurement. Experimental results contradicted the statistical predictions of this class of Hidden-Variable Theorems. Gadway received his B.A. in astronomy-physics from Colgate University in 2007, as well as a minor in East Asian studies. At Colgate he received the physics & astronomy department's Alumni Award and the Japanese department's Mori Award. Gadway is currently pursuing a PhD in physics at Stony Brook University.

Edward A. Bouchet Award

Ronald E. Mickens

Clark Atlanta University

Citation: "For contributions to the understanding of nonlinear oscillations, the creation of novel numerical techniques for differential equations and his motivational lectures and writings about the history of African American physicists.'

Ronald Mickens received a PhD in theoretical physics from Vanderbilt University (1968). He held postdoctoral positions at the MIT Center for Theoretical Physics (1968-70), Vanderbilt (1980-81), University and the Joint Institute for Laboratory Astrophysics



(1981-82). He was professor of physics at Fisk University from 1970-1981. Presently, he is the Distinguished Fuller E. Callaway Professor at Clark Atlanta University. His current research interests include nonlinear oscillations, asymptotic methods for difference and differential equations, numerical integration of differential equations, the mathematical modeling of periodic diseases, and the history/sociology of African Americans in science. His scholarly writings have appeared in reference works such as African American Lives (Oxford University Press), American National Biography (Oxford University Press), and Biographical Encyclopedia of Scientists (Marshall Cavendish).

Joseph A. Burton Forum Award

Pierre Goldschmidt International Atomic Energy Agency (retired)

Citation: "For transforming the safeguards culture and procedures of the IAEA, greatly strengthening its

ability to detect nuclear proliferation activities, and for his courage and integrity, especially in the period

Pierre Goldschmidt is presently a non-resident visiting scholar with Carnegie Endowment for International Peace and a visiting scholar with Pôle Bernheim Paix et Citoyenneté in Brussels. Goldschmidt has been Deputy Director General, Head of the Department of Safeguards, at the International Atomic Energy Agency, from May 1999 to June 2005. During that period the Department of Safeguards shifted its emphasis from a facility-by-facility material accountancy approach



to an integrated State evaluation process and has improved its capability to detect undeclared nuclear material and activities. Goldschmidt received a B.A. in electro-mechanical engineering and a PhD in applied science from the University of Brussels respectively in 1963 and 1971, and a M.S. in nuclear engineering from the University of California, Berkeley, in 1966.

John Dawson Award for Excellence in Plasma Physics (2007)

Andrea M. Garofalo Columbia University

Gerald A. Navratil Columbia University

Michio Okabayashi Princeton Plasma Physics Laboratory

Edward J. Strait

General Atomics Citation: "For experiments that demonstrated the

stabilization of the resistive wall mode and sustained operation of a tokamak above the conventional free boundary stability lmit."

Andrea M. Garofalo received his Laurea degree

in nuclear engineering from the Università degli Studi di Palermo, Italy, in 1990. He received his PhD from Columbia University in 1997, with a thesis based on experimental work on the High Beta Tokamak, Extended Pulse (HBT-



EP) experiment, supervised by Michael Mauel. Since completing his graduate work, Garofalo has been a research scientist for Columbia University, carrying out MHD stability research at the DIII-D Tokamak National Fusion Facility at General Atomics, in San Diego. This work led to the first demonstration of stable confinement of plasma pressure at nearly double the conventional free-boundary stability limit in a tokamak. Since then, he has been pursuing the application of this discovery toward the realization of high-beta, steady-state "advanced tokamak" plasmas.

Gerald A. Navratil received his PhD in plasma

physics from the University of Wisconsin-Madison in 1976. In 1977 he joined the faculty of Columbia University. His research work focuses on MHD equilibrium and stability of magnetically confined plasmas. He directs research on



the HBT-EP tokamak facility in the Columbia Plasma Physics Laboratory as well as off-campus collaborations at the DIII-D National Tokamak Facility in San Diego and the NSTX Experiment at the Princeton Plasma Physics Laboratory.

Michio Okabayashi received his PhD in 1968 from the University of Tokyo. In 1968, Okabayashi took a position at the Princeton Plasma Physics Laboratory, where he has been conducting research in the area of MHD macro



stability. His primary interest has been plasma stability and device performance improvement. In the 1970s, Okabayashi's main focus was on non-circular tokamaks. He was a key contributor to the design of the Princeton Divertor Experiment (PDX), the Princeton Beta eXperiment (PBX), and the Princeton Beta eXperiment-Modified, PBX-M. He conceived of bean-shaping to overcome the ideal MHD stability limit using a highly non-circular cross section. On PBX-M, he discovered the resistive wall mode, an external kink modified by the resistive wall. Since then, his primary research focus has been the active stabilization of the resistive wall mode.

Edward J. Strait earned his PhD at the University of Wisconsin-Madison in 1979. Strait joined General Atomics in 1982, where he worked first on the Doublet III tokamak and then its successor, DIII-D. He developed DIII-D's magnetic diag-



nostic system, which is used for feedback control of the discharge, equilibrium reconstruction, and stability analysis. His research has focused on the MHD stability of tokamak plasmas, including the stability limits of high beta plasmas, instabilities associated with transport barriers, and the stability of toroidicityinduced Alfven eigenmodes. He is currently working on wall stabilization of high beta plasmas and active control of resistive wall mode instabilities. Strait is manager of the ITER Physics research group in the DIII-D Experimental Science Division.

John H. Dillon Medal for **Research in Polymer Physics**

Kari Dalnoki-Veress McMaster University

"For significant and innovative Citation: experiments in glass formation and polymer crystallization at the nanoscale."

Kari Dalnoki-Veress is an experimental physicist

interested in soft materials. He received his PhD (1998) at the University of Guelph. Dalnoki-Veress then worked as a post-doctoral research fellow at the University of Sheffield in England. In 2001, he moved back to Canada to McMaster University in On-



tario. Dalnoki-Veress' research group investigates the physical properties of soft materials at interfaces with a focus on polymeric and biological systems. Current research topics of the group include polymer crystallisation, cell adhesion, measurement of micromechanical properties, friction, self-assembly, interfacial properties, and laser lithography. The primary, long term goal is to obtain a more fundamental understanding of the effects of confinement, surfaces, and interfaces in soft material systems.

Excellence in Physics Education Award

University of Washington Physics Education Group (Lillian C. McDermott, Paula R.L. Heron, Peter Shaffer)

Citation: "For leadership in advancing research methods in physics education, promoting the importance of physics education research as a subdiscipline of physics, and developing research-based curricula that have improved students' learning of physics from kindergarten to graduate school.'

Joseph Keithley Award for Advances in **Measurement Science**

Björn O. Wannberg Gammadata Scienta AB

Citation: "For advances in the development of angle-resolved electron analyzers for photoelectron spectroscopy.

Bjorn Wannberg received his PhD from Uppsala University in 1972. He was then recruited by later Nobel Laureate Kai Siegbahn to work on the electron optical aspects of photoelectron spectrometers. Wannberg became engaged in the start of



the Scienta company (now VG Scienta AB) in the mid-1980s, with the aim to commercialize the spectrometer development. He invented a novel way to operate a hemispherical electron energy analyzer in order to collect the energy distributions for a large number of emission directions in parallel. The successive improvement of this so called "angular mode" has been one of his main tasks ever since. Since 2000, he has been working as a consultant in particle optics, although with strong ties to VG Scienta. He is still active in the development of new instruments for angleresolved photoelectron spectroscopy.

Maria Goeppert Mayer Award

Vassiliki Kalogera

Northwestern University

Citation: "For her fundamental contributions to the study of the evolution and fate of compact objects in binary systems, focusing on their observations via X-rays and on their importance for gravitational wave detectors.'

Vassiliki Kalogera received her PhD in astronomy in 1997 from the University of Illinois at Urbana-Champaign. In 1997 she joined the Harvard-Smithsonian Center for Astrophysics as a CfA Postdoctoral Fellow and she was awarded the Clay Post-



doctoral Fellowship in 2000. Kalogera joined the faculty at Northwestern University in 2001. Kalogera's research interests are in the astrophysics of compact objects, in particular their formation and evolution in multiple stellar systems. She studies the physical properties of X-ray binaries, millisecond radio pulsars and double compact objects in our own and other galaxies and works on the theoretical interpretation of current observations of their electromagnetic emission and their anticipated gravitational radiation.

Nicholson Medal for Human Outreach

David P. Landau

University of Georgia

Citation: "For his work in computational physics recognized internationally and his creation and leadership of the Center for Simulational Physics that has had a high influence on educating young scientists from many countries in computer simulations.'

David P. Landau received a PhD in physics from Yale University in 1967. After a postdoctoral year in Grenoble and a year as a Lecturer at Yale University, he moved to the University of Georgia where he is currently Distinguished Research Professor



of Physics and founding Director of the Center for Simulational Physics. His research involving computer simulations (primarily Monte Carlo) has been featured in publications from Physical Review Letters to the New York Times. The Wang-Landau sampling method is now "state-of-the-art" in statistical physics and related fields.

Leo Szilard Lectureship Award

Anatoli Diakov

Moscow Institute of Physics and Technology

Pavel Podvig

Stanford University

Citation: "For establishing a center for scientific study of arms control, for landmark analyses, and for courage in supporting open discussion of international security in Russia'

Anatoli Diakov is Professor of Physics at the Moscow Institute of Physics and Technology (MIPT). Diyakov received his PhD from MIPT in 1975. In 1975 Diyakov joined the staff of the General Physics Department of MIPT,



where he teaches general physics. He has also carried out research in the field of the microscopic dynamics of elementary processes in gases. In 1991, jointly with Frank von Hippel from Princeton University, he established the Center for Arms Control, Energy and Environmental Studies at MIPT. Diyakov has been the Director of the Center since its establishment.

Pavel Podvig is a researcher at the Center for International Security and Cooperation at Stanford University. Before coming to Stanford in 2004, he worked at the Center for Arms Control Studies at the Moscow Institute of Physics and Technology



(MIPT). Podvig graduated from MIPT with a degree in physics in 1988 and in 1990 he helped Anatoli Diyakov to establish the Center for Arms Control Studies. Podvig's work at the Center included research on technical and political aspects of missile defense, early-warning, command and control, and US-Russian arms control process. In 2004 Podvig received a PhD in political science from the Moscow Institute of World Economy and International Relations.

DISSERTATION AWARDS

Andreas Acrivos Dissertation Award in Fluid Dynamics (2007)

David Saintillan

Courant Institute of Mathematical Sciences

Citation: "Collective Dynamics in Dispersions of Anisotropic and Deformable Particles.'

David Saintillan received a B.S. in engineering from Ecole Polytechnique in Paris, France in 2001. He then attended Stanford University, where he received his PhD in 2006. His dissertation was entitled: "Collective dynamics in dispersions



of anisotropic and deformable particles." He was a Junior Research Scientist at the Courant Institute of Mathematical Sciences of New York University, and then joined the Department of Mechanical Science and Engineering of the University of Illinois at Urbana-Champaign as an Assistant Professor in January 2008. His current research interests include applications of fluid dynamics to biophysical problems, and non-linear electrokinetic effects in particulate flows and microfluidic applications.

Outstanding Doctoral Thesis Research in Atomic, Molecular and **Optical Physics Award (2007)**

Cindy Regal

University of Colorado, Boulder

Citation: "Experimental realization of BCS-BEC crossover physics with a Fermi gas of atoms.

Cindy Regal attended Lawrence University in Wisconsin as an undergraduate. In 2001 she earned her B.A. in physics from Lawrence and was awarded a Hertz Foundation fellowship for her subsequent graduate studies at the University of Colorado.



Regal's graduate dissertation presented experiments on ultracold potassium Fermi gases performed in the group of Deborah Jin at JILA, a joint institute of NIST and the University of Colorado, Boulder. These experiments, along with the work of groups studying lithium Fermi gases, pioneered the techniques necessary to achieve pairing and condensation in the crossover between Bose-Einstein condensation and BCS superconductivity. In the fall of 2007 she moved to Caltech to join Jeff Kimble's group as a Millikan postdoctoral fellow.

Outstanding Doctoral Thesis in Beam Physics Award (2007)

Jeroen van Tilborg

Lawrence Berkeley National Laboratory

Citation: "For his dissertation describing the detection, characterization, and imaging of coherent THz radiation from laser-wakefield-accelerated electron beams.

Jeroen van Tilborg completed his undergraduate and master's degrees in applied physics at the Technische Universiteit Eindhoven in 2001. In 1999 he spent a few months on an internship at Lawrence Berkeley National Laboratory (LOASIS



group) in Berkeley. He returned to LBNL (LOASIS group) in 2001 to work on his PhD under Wim Leemans, although officially enrolled at Eindhoven under Marnix van der Wiel. His work was focused on temporal characterization of the femtosecond bunches produced by the wakefield accelerator. This was done through analysis of the coherent transition radiation emitted by the 50-femtosecond bunches as they leave the plasma. Van Tilborg is presently a postdoc at LBNL in the Atomics and Molecular Optics group, doing studies of atomic and molecular dynamics using ultra-short intense VUV pulses produced through High Harmonics Generation.

Nicholas Metropolis Award for Outstanding Doctoral Thesis Work in Computational Physics

Soon Yong Chang

University of Washington

Soon Yong Chang is a native of Seoul, South Korea. He received his PhD in physics in 2006 from the University of Illinois at Urbana-Champaign (UIUC). Under the guidance of Prof. Vijay R. Pandharipande(d. 2006), he applied the Green's Function Monte Carlo methods to the study of the strongly interacting dilute Fermi gases. Chang received his Licenciado degree in physics from the National University of Cordoba (Argentina) in 1997. After a brief foray into industry, he returned to academia, getting an MSc. in theoretical physics from SDSU in 2001. He then moved to Champaign, Illinois to pursue a PhD in physics. Chang is now a postdoctoral research associate at the INT-University of Washington in Seattle. He has a broad interest in condensed matter physics, material physics, and general many-body physics.

Nuclear Physics Dissertation Award

Deepshikha Choudhury

Ohio University

Nikolai Tolich Stanford University

Citation: "Investigating neutron polarizabilities

and NN scattering in heavy-baryon chiral perturbation

Deepshikha Choudhury (Shukla) received a B.Sc (Hons.) from Cotton College, Guwahati, India in 1995, an M.Sc. (Physics) from Indian Institute of Technology, Delhi, India in 1997, and a PhD in physics from Ohio University in 2006. At Ohio University

she focused on using Compton scattering on light nuclei in order to devise roadmaps that would enable the experimental extraction of neutron electromagnetic polarizabilities. joined the Department of Physics at George



Washington University as a post-doctoral researcher in 2006, and is currently working on Effective Field Theory techniques in the study of various physical processes involving few-nucleon systems.

Citation: "Experimental study of terrestrial electron anti-neutrinos with KamLAND"

Tolich bio unavailable at press time.

Marshall N. Rosenbluth Outstanding **Doctoral Thesis Award (2007)**

Erik Spence

ETH Zürich, Institut für Geophysik

Citation: "For a dynamo experiment that provided a laboratory demonstration of dipole magnetic field, generated by turbulence, in an MHD flow.

Erik Spence received his bachelor's degree in physics from McGill University (Montréal, Canada) in 1998. He did his PhD studies on the Madison Dynamo Experiment, a one-meter-diameter sphere of flowing liquid



sodium, in the physics department of the University of Wisconsin, Madison. He was involved with most aspects of commissioning the experiment, including its design, fabrication, construction, operation and data analysis. His dissertation work, done with Professor Cary Forest, demonstrated the presence of a turbulent electromotive force in the experiment. Spence is presently employed by the Institut für Geophysik at ETH Zürich, where he is studying the application of liquid metal experiments to planetary cores.

Mitsuyoshi Tanaka Dissertation Award in Experimental Particle Physics

Jedrzej Biesiada, Princeton University

Citation: "Measurement of Branching Fractions and CP-Violating Asymmetries in BO-KOKO-bar and B^+ – K^O -bar K^+ Decays at the BaBar Experiment.

Biesiada received a PhD in 2007 from Princeton University. For his Biesiada dissertation, studied the violation of the charge-parity (CP) symmetry in the rare decays of B mesons to two kaons. Biesiada's work resulted in the first obser-



vation of these processes and the first measurement of CP violating parameters in this class of decays, opening up a new area of investigation at the B factories. He is currently working on the ATLAS experiment as a Chamberlain Fellow at the Lawrence Berkeley National Laboratory.

APS Council Announces 2007 APS Fellows

2007 Fellows (Alphabetical by Last Name)

The APS Council elected the following as Fellows of the Society at its November 2007 meeting. Nominations for fellowship are received at APS headquarters throughout the year, and are forwarded for review to the appropriate division, topical group, or forum fellowship committees. The deadlines for the various units appear on page 8 of this insert, and are posted on the web.

Fellowship nomination forms may be completed on the web at http://www.aps.org/programs/honors/ fellowships/nominations.cfm. Information for completing the form is available at http://www.aps.org/programs/ honors/fellowships/nomination-requirements.cfm.

Ackerson, Bruce

Oklahoma State University **Condensed Matter Physics**

For theoretical and experimental advances in the physics of colloidal liquids and crystals.

Aharoni, Herzl

Ben-Gurion University of Negev **Industrial and Applied Physics**

Pioneering contributions to the invention, research, and development of two- and multi-terminal Single Crystal Silicon Light Emitting Devices (SiLED's) for allsilicon intergrated optoelectronic systems, combining

semiconductor physics and standard IC technology.

Alloul, Henri

University of Paris, Sud

Condensed Matter Physics

For nuclear magnetic resonance studies of strongly correlated electronic materials including the pseudogap phase of the cuprates through Knight shift measurements, local magnetic moments in cuprates, and studies of Kondo effect and spin-glasses.

Amidei, Dan University of Michigan **Particles and Fields**

For pioneering contributions to the development of bquark tagging at hadron colliders, and for application of b-tagging to the discovery and study of the top quark.

Archer, Lynden Cornell University

Polymer Physics

For outstanding contributions to the understanding of interfacial properties and bulk viscoelasticity of polymer liquids.

Artuso. Marina Syracuse University

Particles and Fields

For achievements in building RICH and silidetectors for high energy experiments and for studies of heavy quark decays.

Bandrauk, Andrew

University of Sherbrooke Atomic, Molecular & Optical Physics

For pioneering theoretical contributions to elucidating intense laser interactions with molecules, including predictions of the existence of new molecules and of enhanced molecular ionization in intense laser fields, and of the usefulness of chirped pulses to control photochemical processes.

Bao, Gang

Georgia Institute of Technology

Biological Physics

For pioneering contributions in the field of molecular biomechanics and seminal impacts in developing molecular sensors for diagnosis of cellular functions

Baranger, Harold Duke University

Condensed Matter Physics

For contributions to mesoscopic and nanoscale physics, especially the manifestations of classical chaos in quantum properties and the interplay of quantum interference and electron-electron interactions.

Baratoff. Alexis

University of Basel

Condensed Matter Physics

For fundamental contributions to the theory of tunneling in superconductors and in scanning probe microscopes.

Barger, Amy

University of Wisconsin

Astrophysics

her pioneering observations and fundamental insights into the formation and evolution of galaxies and supermassive black holes.

Bohnen, Klaus

IFP - Forschungszentrum

Computational Physics

For his groundbreaking work in theoretical calculations of the dispersion of surface phonon using ab initio methods.

Boninsegni, Massimo University of Alberta

Computational Physics

For the development of a novel methodology enabling accurate, large-scale Quantum Monte Carlo simulations of interacting many-body systems, and for its application to the investigation of the supersolid phase of helium and of superfluidity of molecular hydrogen.

Borland, Michael

Argonne National Laboratory **Physics of Beams**

For outstanding contributions to fourth generation light

sources, particularly for development and support of the program ELEGANT, the first integrated accelerator code to realistically model coherent synchrotron radiation effects.

Brown, Elliott R.

University of California, Los Angeles Industrial and Applied Physics

For breakthroughs in THz science and technology including new solid-state coherent sources (1) resonanttunneling oscillators, and (2) photomixers; new detecjunctions; and high-resolution spectroscopy of solids.

Brown, Gail

Wright-Patterson AFB

Industrial and Applied Physics

For contributions to the fundamental physics and development of "quantum confined" or "quantum well" semiconductor heterostructure materials for applications in high-performance infrared detectors.

Budai, John

Oak Ridge National Laboratory

Materials Physics

For seminal materials physics contributions to the structure and synthesis of quasicrystals, nanocrystals formed by ion-implantation, and epitaxial high-temperature superconductors using advanced synchrotron x-ray techniques.

Burke, Kieron

University of California, Irvine **Condensed Matter Physics**

For his seminal contributions to the development and application of the density functional theory of ground and excited electronic states, and electronic dynamics in condensed matter.

Burrows, David

Pennsylvania State University

For his seminal contributions to high energy as-

trophysics, including his early development of CCD detectors for X-ray astronomy and his leadership of the XRT instrument on SWIFT.

Carrington, Tucker

Queen's University **Chemical Physics**

For the development and application of new iterative tools for solving the time-independent Schrödinger equation.

Celliers, Peter

Lawrence Livermore National Laboratory

Shock Compression of Condensed Matter

For developing a new generation of high-precision ultra-fast diagnostics, which have enabled accurate laboratory measurements of shock compressed condensed matter in the ~1 to 100 Mbar regime.

Cerdonio, Massimo

University of Padova **International Physics**

For his commitment to and leadership in establishing an international gravitational wave network and for promoting international collaborations through his leadership of the Gravitational Wave International Committee.

Chance, Britton

University of Pennsylvania

For prodigious contributions to biological optics over more than seventy years, and for the use of physical methods in fundamental discoveries concerning cell metabolism.

Chang, Shih-Lin

National Tsing Hua University

International Physics

For his outstanding contributions in developing X-ray multiple diffraction methods for solving the X-ray phase problem in crystallography, in developing Fabry-Perot resonators for hard X-rays, and in promoting international collaborations.

Chapman, Michael

Georgia Institute of Technology

APS

For developing an all-optical method for creating atomic Bose-Einstein condensates, and for seminal experimental work in the fields of quantum degenerate gases, cavity quantum electrodynamics and atom optics.

Chialvo, Dante

Northwestern University

Biological Physics

For advances in the understanding of physiological mechanisms using the methods of nonlinear dynamics, in particular of the bifurcations leading to cardiac sudden death and the constructive role of noise in neural coding of information.

Civale, Leonardo

Los Alamos National Laboratory

Condensed Matter Physics

For seminal contributions to the understanding of anisotropic electrical and magnetic properties of superconductors and vortex physics.

Clarke, Nigel

University of Durham **Polymer Physics**

For contributions made to the field of soft condensed matter, and in particularly the phase behavior and dynamics of polymer systems.

Collins, John C.

Pennsylvania State University

Particles and Fields

For seminal contributions to the foundation of quantum chromodynamics, including the proofs of a series of factorization theorems, and the analysis of high energy scattering.

Collins, Lance R.

Cornell University **Fluid Dynamics**

For new physical understandings of the dynamics of aerosol particles, droplets, polymer molecules, and reacting gases in turbulence through novel direct numerical simulations and insightful theories.

Corkum, Paul

National Research Council

Atomic, Molecular & Optical Physics

For developing the ideas and concepts that led to the field of attosecond science, to the understanding of high harmonic emission and recollision physics.

Cote. Robin

University of Connecticut

Atomic, Molecular & Optical Physics

For contributions to the study of ultracold systems, and the effect of long-range interactions in ultracold Rydberg gases, atom-ion mixtures, and the formation of ultracold molecules.

Crease, Robert

State University of New York at Stony Brook **History of Physics**

For his extensive historical writings on physics, in-

cluding "The Second Creation", "Making Science A Biography of Brookhaven National Laboratory" and his completion of Robert Serber's memoirs and Abraham Pais' biography of J. Robert Oppenheimer.

Crespi, Vincent

Pennsylvania State University

Computational Physics

For creative ideas and innovative computations enhancing our understanding of nanoscale matter and predicting new structures and materials with properties possess ing technological and/or fundamental scientific value.

Croft, Mark

Rutaers University

Condensed Matter Physics

For seminal contributions to correlated electron physics and electronic structure of rare earth and transitional metal compounds; novel applications of synchrotron radiation.

Crommie, Michael

University of California, Berkeley

Condensed Matter Physics

For application of scanning tunneling microscopy, atomic and molecular manipulation, and scanning tunneling spectroscopy to the electronic and magnetic properties of surface-based nanostructures.

Cuneo, Michael

Sandia National Laboratories

Plasma Physics

For systematic wire-array plasma physics experiments and optimization of x-ray sources for indirect drive inertial confinement fusion driven by z-pinches.

Dabrowski, Bogdan

Northern Illinois University

Magnetism & Its Applications

For developing the design rules of synthesis and determination of the structure - properties rela-tionships for a vast range of novel superconductmagnetic, and magneto-resistive perovskites.

Das Sarma, Dipankar

Center for Advanced Materials

International Physics

Prof. D. D. Sarma is an internationally known leader of Physics in India with outstanding papers in leading journals on electronic and magnetic properties of strongly correlated materials based on indepth experimental and theoretical investigations.

De Yoreo, James

Lawrence Livermore National Laboratory

Biological Physics

For his pioneering work using in situ force microscopy to understand the physical principles underlying biocrystallization, particularly the control of biomolecules and other modifiers on energy landscapes, step dynamics and morphological evolution during crystal formation.

Dixon, Roger

Fermi National Accelerator Laboratory

Particles and Fields

For critical leadership of the Tevatron Run II Luminosity Upgrade Program, and outstanding leadership in the construc $tion and {\it initial} operation of the {\it Cryogenic Dark Matter Search}.$

Dogariu, Aristide

University of Central Florida

Laser Science

For his outstanding contributions to the extraction of information on the random medium and for the development of the innovative technique of variable coherence tomography.

Dupuis, Michel

Pacific Northwest National Laboratory

Chemical Physics

For his significant contributions to the development of electronic structure methods and computer codes for the simulation of molecular properties and reactivity.

Dutcher, John

University of Guelph

Polymer Physics

For fundamental contributions to the understanding of polymers at the nanoscale; particularly to the development of novel experimental techniques for the study of ultrathin films.

Everitt, C.W. Francis

Stanford University

Gravitation

For his pioneering role as scientist, visionary, and leader in the development and successful operation of Gravity Probe B, a mission to measure the general relativistic dragging of inertial frames by the rotating Earth.

Ezra, Gregory

Cornell University

Chemical Physics

For his deep contributions to the analysis of the classical, semi-classical, and quantum molecular mechanics of systems of multiple degrees of freedom, with applications to their linear and non-linear spectroscopies.

Feigelman, Mikhail

Landau Institute

Condensed Matter Physics

For contributions to the theory of disordered materials, in particular to pinned charge density waves, spin glasses, pinned vortices in superconductors, glass formation in systems without quenched disorder, and disordered superconductor-normal metal structures.

Feng, Jonathan

University of California, Irvine

Particles and Fields

For his contributions to the understanding of the properties of supersymmetric particles and the possible role of these particles in forming the dark matter of the universe.

Fenter, Paul

Argonne National Laboratory

Condensed Matter Physics

For innovative application of x-ray scattering to the study of complex molecular-scale structures and processes at organic-inorganic and mineral-water interfaces.

Fischer, Wolfram

Brookhaven National Laboratory

Physics of Beams

For the successful commissioning of high luminosity high energy collisions at the Relativistic Heavy Ion Collider and outstanding contributions to the understanding of high-energy accelerator and collider properties.

Flanagan, Eanna

Cornell University

Gravitation

In recognition of his contributions to gravitational physics, ranging from the physics of gravitational waves and their detection, to the astrophysics of neutron stars, and to cosmology and quantum gravity.

Flatte, Michael

University of Iowa

Condensed Matter Physics

For contributions to the theory of spin-dependent properties of semiconductors, especially transient and inhomogeneous magnetic and optical properties, and applications to spintronic devices.

Forden, Geoffrey

Massachusettes Institute of Technology

Physics and Society

For Innovative and important contributions to arms control and international security, in areas such as proliferation of chemical, biological, and nuclear weapons, military space programs, early warning systems, and ballistic missile defenses.

Fox, Rodney

Iowa State University

Fluid Dynamics

For ground-breaking contributions to the field of turbulent reacting flows.

Frankfurt, Leonid

Tel Aviv University **Nuclear Physics**

For seminal contributions to high energy and high momentum transfer probes of hadrons and nuclei including inventing the additive quark model, deriving the light front approach to nuclei, showing how to observe nucleon-nucleon corrections, and discovery of high-energy color transparency.

Furman, Miguel

Lawrence Berkeley National Laboratory

Physics of Beams

For his pioneering development and application of simulation tools for the beam-beam and electron cloud effects in colliders and storage rings.

Gao, Haiyan

Duke University **Nuclear Physics**

For her extensive contributions to understanding the quark/hadron transition region and for determinations of the nucleon electromagnetic form factors.

Garnavich, Peter

University of Notre Dame **Astrophysics**

For pioneering work on the discovery of dark energy and the cosmic equation of state, along with important ob-servational discoveries regarding the nature of gamma ray bursts and the physics of supernova light curves.

Gary, S

Los Alamos National Laboratory

Plasma Astrophysics

For his fundamental and definitive contributions to our understanding of collisionless wave-particle interactions and their effects on plasma properties in the solar atmosphere, the interplanetary medium, and all astrophysical plasmas.

Genzer, Jan

North Carolina State University

Polymer Physics For the design, synthesis, and engineered surfaces

Gershenfeld, Neil Massachusettes Institute of Technology

Physics and Society For significant contributions ranging from quantum computing to advanced technologies for global

development and for leadership in bringing science out of the laboratory and into the real world. Gershenson, Michael

Rutgers University **Condensed Matter Physics** experimental studies of quantum trans-

and dephasing processes low-dimensional electronic dered

Giannetta, Russell

University of Illinois Urbana-Champaign **Condensed Matter Physics**

For significant advances in experimental techniques for measuring the superconducting penetration depth and their application for elucidating the pariing symmetry and electronic structure of unconventional superconductors.

Gillies, George

University of Virginia

Instrument & Measurements Science For enduring contributions to the development of magnetic

stereotaxis. His inventions already are guiding catheters to critical regions of the human heart. Current research may lead to delivery of medications to the brain as well.

For important contributions to the fundamental un-

Girimaji, Sharath

Texas A & M University **Fluid Dynamics**

derstanding of elementary turbulence processes; and, based on this improved knowledge, for the development of widely-used engineering closure models for turbulence and turbulent mixing.

Fluid Dynamics For pioneering computational research on turbulent reactive flows, and especially for the development of the filtered density function methodology.

methods to elucidate key physics associated with time

dependent flow phenomena for flow control applica-

tions in turbulent jets, shear layers and separated flows.

Glauser, Mark

Givi. Pevman

University of Pittsburgh

Syracuse University Fluid Dynamics For his innovative use of multi-point low-dimensional

Glenzer, Ari Georgia Institute of Technology Fluid Dynamics

For in-depth insight into flow structure through in-

novative experiments, and the creation of fundamentally new approaches to flow control, leading to the dramatic alteration of the underlying physics.

Golub, Robert

North Carolina State University

Nuclear Physics

For pioneering research in studies of the neutron electric dipole moment, for development of the superthermal technique for production of ultracold neutrons, and for development of new methods in neutron spin echo research.

Goncharov, Valeri

University of Rochester

Plasma Physics

For outstanding contributions to the theory of the ablative Rayleigh-Taylor and Richtmyer-Meshkov instabilities and for development of a technique to reduce the growth of these instabilities by means of adiabat shaping, enhancing the potential of direct-drive ICF to achieve very high performance.

Gonzalez, Gabriela

Louisiana State University

Gravitation

For her experimental contributions to the field of gravitational wave detection, her leadership in the analysis of LIGO data for gravitational wave signals, and for her skill in communicating the excitement of physics to students and the public.

Gonze, Xavier

University of Catholique de Louvain

Computational Physics

For contributions to density-functional perturbation theory and its application to dielectric properties, and for leadership in open-source software de-velopment for the electronic structure community.

Gover, A. Tel Aviv University

International Physics For outstanding scientific achievements and leadership in international cooperation in the area of Free Electron Lasers.

Gratta, Giorgio Stanford University Particles and Fields For leadership and vision in the development of experi-

ments to probe neutrino phenomena, including lepton

mixing, geoneutrinos and neutrinoless double-beta decay.

For major contributions to theoretical chemical dy-

Gray, Stephen

Argonne National Laboratory Chemical Physics

namics and to the understanding of the interaction of electromagnetic radiation with nanoparticles.

Greven, Martin

Stanford University **Materials Physics** For establishing a stellar record in growth and perfection of high quality crystals of oxide superconductors, which have permitted both his inelastic neutron and X-ray scattering experiments, and a host of other experiments (STM, ARPES, and optical measurements) by his collaborators

which led to a number of important advances in the field.

physics with quantum degenerate Bose and Fermi gases,

in particular Bose Einstein condensation of molecules,

Grimm, Rudolf

modeling of

in

electronic

disor-

systems.

interfaces.

and

Institute for Experimental Physics Atomic, Molecular & Optical Physics For fundamental contributions in experimental atomic

Cooper pairing of cold fermionic atoms, Efimov states, and repulsively bound atom pairs in optical lattices.

Gunner, Marilyn City College of New York **Biological Physics** For her work in both experimental and theoretical studies of electron and proton transfer processes in proteins, in particular for her beautiful work coupling the theory of electrostatic interactions to the dynamics of charge trans-

fer in photosynthetic reaction centers , and in recogni-

tion of her service to the Division of Biological Physics.

Hall, Carol North Carolina State University

For creating a new paradigm to simulate protein aggregation through a combination of intermediate-resolution molecular models and the discontinuous molecular dynamics method.

Biological Physics

Haus, Joseph University of Dayton

For his seminal contributions to nonlinear and

of heterogeneous

materi-

als, especially photonic band gap structures.

Education

Laser Science

quantum optics

Heron, Paula University of Washington

For her leadership in the physics education research community and development and active dissemina-tion of research-based curricula that significantly

Hershcovitch, Ady Brookhaven National Laboratory

impact physics instruction throughout the

Hewett, Joanne

Plasma Physics

Stanford University Particles and Fields

For her contributions to our understanding of con-

straints on and searches for physics beyond the Standard Model, and service to the particle physics community leading studies of future experiments.

For inventing and developing original plasmas devices, as well as improving existing devices for applications in research and industry

that led to new technologies and new physics.

Lawrence Livermore National Laboratory

Plasma Physics

For extensive contributions to laser-plasma interaction physics and radiation hydrodynamic design of inertialconfinement fusion targets, and to the fundamental physics of linear and nonlinear wave propagation in plasma.

Hjorth-Jensen, Morten

University of Oslo

Nuclear Physics

For his seminal developments in nuclear many-body theory and its applications in various nuclear manybody calculations ranging from finite nuclear struc-ture, to level densities, to infinite nuclear matter.

Hollenhorst, James

Agilent Labs

Industrial and Applied Physics

For outstanding contributions to measurement science and low noise electronics and for leadership of physical science based research and development in support of electronics and life science businesses.

Homes, Christopher

Brookhaven National Laboratory

Condensed Matter Physics

For seminal contributions to the development of infrared spectroscopy, plication to strongly correla and its apstrongly correlated systems.

Howard, Don

University of Notre Dame

History of Physics

For his ground-breaking studies of the interplay between physics and philosophy of science in the 20th century, especially in connection with the work of Einstein and Bohr, and for organizing conference series and editing book series fostering the dialogue between physicists and philosophers and historians of science.

Hughes, Emlyn

Columbia University **Particles and Fields**

For leadership in forefront experimental research that elucidated the spin structure of the nucleon and provided unique precision tests the Standard Model.

Hunt, Jeffrey

Boeing Info Spc & Def Sys

Industrial and Applied Physics

For significant contributions in nonlinear surface spectroscopy, and ground-breaking applica-tions of laser physics in the aerospace industry.

Huston, Joey

Michigan State University

Particles and Fields

For scientific leadership and fundamental contribu-tions to the study of the strong interaction of quarks and gluons through definitive experiments at hadron colliders and important phenomenological calculations.

Idzerda, Yves

Montana State University

Materials Physics

For his outstanding contributions to the deand application of soft x-ray spectroscopies to the study of magnetic systems.

Ihm, Jisoon

Seoul National University

Materials Physics

For his fundamental contributions to the theory of solids, surfaces and nanostructures, especially his development of the momentum-space formalism for total energy of solids.

National Institute of Standards & Technology

Instrument & Measurement Science

For world-leading technical contributions and leadership in applying transition-edge superconducting sensors to materials and nuclear analysis and astronomical observations.

Jaffe, Charles

West Virginia University

Few-Body Systems

For fundamental discoveries in the theory of transport in atomic, molecular, and celestial mechanical systems.

Jarrell, Mark

University of Cincinnati

Computational Physics

For seminal contributions to the development of matter ing dynamical mean field theory and the dynamical cluster approximation applied to advancing the understanding of strongly correlated electron systems.

Jeffrey, William

Institute for Defense Analysis

APS

For excellence in management of scientific and technical programs, particularly those of the Na-tional Institute of Standards and Technology.

Jessen, Poul

University of Arizona

Atomic, Molecular & Optical Physics

For pioneering contributions to the development of optical lattices of laser cooled atoms, quantum information processing, and quantum control experiments with atomic spins.

Jonas, David

University of Colorado

Laser Science

For his pioneering contributions to phase-resolved nonlinear optics and the demonstration and subsequent development of femtosecond two-dimensional Fourier transform spectroscopy.

Jones, Kevin

Williams College

Atomic, Molecular & Optical Physics

For seminal contributions to the study of cold col-

Kaganovich, Igor

socation

Princeton Plasma Physics Laboratory

spectroscopy

Plasma Physics

For pioneering contributions to the kinetic modeling of plasmas, including collisionless electron heating, negative ion dynamics, Hall thrusters, and intense ion beam dynamics.

lisions and to the development of photoas-

in

ultracold

gasses.

Kalia, Rajiv

University of Southern California

Computational Physics

For contributions to the development of multimillion-atom multiscale simulation methods on paral-lel computers and their application to the fundamental understanding of atomistic mechanisms for broad properties and processes in nanostructured materials.

Kardar, Mehran

Massachusettes Institute of Technology

Statistical & Nonlinear Physics

For pioneering work in a broad range of topics in statistical physics, including the dynamics of growing interfaces, directed polymers in random media, tethered surfaces, stability of charge polymers and, more recently, biophysical systems.

Karma, Alain

Northeastern University

Statistical & Nonlinear Physics

For innovative ideas and results in the study of nonequilibrium spatially-extended processes, especially the phase-field method for solidification and the role of restitution in the excitable dynamics of cardiac tissue.

Kasap, Safa

University of Saskatchewan

Industrial and Applied Physics

For contributions to the science and technology of amorphous semiconductors and devices; in particular, for advances in x-ray photoconductors used in direct conversion flat panel x-ray image detectors.

Katz, Howard

Johns Hopkins University

Materials Physics

For introducing designed organic materials as active platforms in electronic and optical devices including transistors and electro-optic modulators, innovations in synthesis and device design, and serving the physical science community through society leadership, editorship, and government outreach.

Kearns, Edward

Boston University

Particles and Fields

For contributions in neutrino physics and particle astrophysics, particularly using the Super-Kamiokande experiment to reveal atmospheric neutrino oscillations and set stringent limits on proton decay.

Kettell, Steven

Brookhaven National Laboratory Particles and Fields

For his leadership in rare kaon decay experiments.

Khanna, Shiv Virginia Commonwealth University **Chemical Physics**

For his pioneering contributions to the theoretical understanding of electronic and magnetic properties of clusters as well as work on superatoms forming a new dimension to the periodic table.

Kim. Philip

Columbia University

Condensed Matter Physics

For the creation of single layer graphite (graphene) and the study of its unusual two-dimensional electronic transport properties.

Kimura, Yoshifumi

Nagoya University Fluid Dynamics

For contributions to the development of our understanding of turbulent flows and the dispersion of scalars in a variety of geophysical settings through the numerical simulations and a comparison of these to theory and experiment.

Kinney, Edward University of Colorado

Nuclear Physics

For his contributions to the experimental study of the spin structure of the nucleon in polarized deep inelastic electron scattering from internal polarized gas targets and for his experimental and theoretical elucidation of pion reaction mechanisms in pion double charge exchange in light nuclei.

Kirkby, David

University of California, Irvine

Particles and Fields

For outstanding contributions to the experimental study and understanding of mixing and CP violation in the neutral B meson system, and for the development of data modeling and analysis software used throughout the high energy physics community.

Kleiber, Paul University of Iowa

Chemical Physics

For contributions to the study of excited state interactions in ion-molecule clusters and in molecular collisions.

Kofman, Lev University of Toronto

Astrophysics

For seminal contributions to the theory of inflation and preheating in the early universe, the role of cosmological constant on the microwave background, and the emergence of the cosmic web from Gaussian density fluctuations.

Krasny, Robert University of Michigan

Fluid Dynamics

For his many achievements in advancing particle methods and tree-code algorithms to allow exceptionally precise computations of vortex dynamics, and his insightful use of the resulting methods to increase the fundamental understanding of regular and chaotic phenomena in fluid flows.

Krushelnick, Karl

University of Michigan

Plasma Physics

For pioneering contributions to experimental high-intensity laser plasma physics including the production of high-quality relativistic electron beams, energetic proton beams and the development of techniques to measure very large magnetic fields in intense laser-produced plasmas.

Kuhn, Sebastian

Hadronic Physics

Old Dominion University

his leadership on measurements nucleon structure functions, in particuin the non-perturbative and valence region.

Kurtsiefer, Christian

National University of Singapore Atomic, Molecular & Optical Physics

For pioneeering contributions to practical quantum cryptography.

Kwiatkowski, Kris

Los Alamos National Laboratory

Nuclear Physics

For his central role in experimental studies of energy dissipation in nuclear reactions which have provided evidence of the nuclear liquid-gas phase transition, and in development of new detector techniques.

Lazzarini, Albert

California Institute of Technology

Gravitation

For leadership in the development of the La-Interferometer Gravitational Wave Observa-(LIGO) and its scientific program, and in the development of large-scale computational grids for gravitational wave physics and other fields of science.

Lewis, Jennifer

University of Illinois at Urbana-Champaign **Materials Physics** For seminal contributions to the fields of colloi-

Lidar, Daniel

University of Soutern California

dal science and directed assembly of materials.

Quantum Information, Concepts and Computation

For his contributions to the theory of decoherence control of open quantum systems for quantum information processing, especially the decoherence free subspace method.

For her trailblazing global hybrid simulations of

the dynamics and structures of solar wind-mag-

Lin, Yu

Auburn University Plasma Physics

netosphere boundary layers; particularly, at the dayside magnetopause and the bow

Massachusettes Institute of Technology Quantum Information, Concepts and

Lloyd, Seth

Computation For seminal contributions to the theory of quancomputation and and their phy quantum physical implementations.

Long, Lyle Pennsylvania State University

Computational Physics

For the advancement and teaching of computational science. In particular, for the use of high per-formance computers for computational fluid dynamics, aeroacoustics, and rarefied gas dynamics.

Longmire, Ellen University of Minnesota

Fluid Dynamics

innovative experiments in particle-laden flows, and the development of new and improved flow diagnostic techniques.

Lopez, Jorge

University of Texas **International Physics** For contributions to nuclear physics, in particular for the understanding of the liquid-gas nuclear phase transition, and

for support of the development of physics in Latin Amer-

turbulent and

ica through research and development collaborations, organization of symposia, and recruitment of students.

Luban, Marshall Iowa State University

Condensed Matter Physics For long-term significant contributions to condensed matter

theory, including pioneering work on the Lifshitz multicritical point, on Bloch oscillations of electrons in semiconductor superlattices, and the modeling of magnetic molecules.

Ma, Jianpeng

Baylor College of Medicine

Biological Physics For outstanding contributions to the field of biophys-

ics are in developing novel computational methods that have substantially expanded one's ability to simulate, model and refine flexible biomolecular systems based on experimental data at low to intermediate resolutions. He is one of the pioneers and leading experts in the field.

understanding of the phenomenon of magnetic rotation

and to the study of neutron-proton pairing correlations.

Macchiavelli, Augusto Lawrence Berkeley National Laboratory

Nuclear Physics For his essential role in the development and use of Gammasphere and for his seminal contributions to the

Macosko, Chris University of Minnesota

Polymer Physics

For pioneering work on the rheology, compatibilization, processing, and properties of polymer blends.

Macrander, Albert

Argonne National Laboratory

Instrument & Measurement Science

For advancement of x-ray science, x-ray optics, and x-ray measurements on crystals and for his leadership as Editor of the Review of Scientific Instruments.

Maekawa, Sadamichi

Tohoku University

Magnetism & Its Applications

For seminal contributions to understanding spin-dependent transport in magnetic materials and nanostructures, high Tc superconductivity, transition metal oxides, the basic physics of spin-electronics, and developing exact numerical many-body techniques study strongly-correlated electronic systems.

Majeski, Richard

For fundamental studies of radio-frequency heating and plasma-wall interactions, including the first observation of Alfvén wave heating in a tokamak, the first demonstration of mode-conversion current drive, and pioneering work in

Magnetism & Its Applications

For innovative research on magnetic nanoparticles and their

Majumder, Protik

Precision Measurement and Fundamental

test atomic theory and probe the basic laws and symmetries of nature, and for engaging talented undergraduate physics students in making such measurements.

Physics and Society

mation on energy and environmental issues.

For his extensive contributions to atomic and nuclear

physics, mathematical phynuclear physics, and in developing physics research programs and education around the world, particularly in emerging nations.

Mason, Thomas E.

For pioneering inelastic neutron scattering measurements on high temperature superconductors and Kondo insulators. Outstanding contributions to neutron instrumentation and leadership of

cal and computational insight into the spectros-copy and dynamics of molecules and molecular complexes that exhibit large amplitude motions.

Oklahoma State University Condensed Matter Physics For major contributions to solid-state radiation dosimetry using thermally and optically stimulated luminescence from wide band-gap insulators, including the development of

Massachusettes Institute of Technology Fluid Dynamics

University of Leeds

For seminal contributions to the theory of dynamics and rheology of entangled polymers, especially polymers with long-chain branching.

International Physics

and nonlinear dynamics; for her efforts to help 'invisible scientists' in emergent countries become globally visible, with special reference to women in international science. Migdall, Alan

Atomic, Molecular & Optical Physics For the development of parametric down conversion and

Carnegie Mellon University

interactions, the development of novel self-assembly techniques to prepare ordered nanoparticle assemblies, and the design of plasmonic magnetic nanoparticles for biomedicine.

Williams College

with accurate and understandable

Makhijani, Arjun Institute for Energy & Environmental Research

Malik, F Bary

Martinez-Miranda, Luz

University of Maryland

Education For sustained achievements in recruiting, mentoring, and advancing women and minorities in physics; for engaging K-16 students in the excitement of research; and for being

Oak Ridge National Laboratory Condensed Matter Physics

McCoy, Anne Ohio State University

McKeever, Stephen

novel luminescence techniques for radiation measurement. McKinley, Gareth

For the development of methods for characteriza-

For being a pioneer in granular physics, and contribu-

Princeton Plasma Physics Laboratory

Plasma Physics

Majetich, Sara

For precision measurements of atomic structure that

For his tireless efforts to provide the pub-

Southern Illinois University International Physics

a superb role model through her elegant research to understand liquid crystal systems and further their application.

the Oak Ridge Spallation Neutron Source project.

Chemical Physics For contributions to the development of theoreti-

Mehta. Anita S. N. Bose Nat Ctr Basic Sci

tions to many and diverse areas in complex systems

the use of liquid lithium as a plasma-facing component.

tion of the rheology of complex liquids and improved understanding of elastic effects and instabilities. McLeish. Tom **Polymer Physics**

correlated-photon generation for metrology, cryptography, communications, and fundamental physics applications.

Milner, Richard

Massachusettes Institute of Technology

Nuclear Physics

For his leadership in the HERMES/DESY and BLAST/ Bates experiments which have advanced our understanding of the spin structure of strongly interacting systems.

Miranda, Rodolfo

University Autonoma Madrid

Materials Physics

For his contributions to surface and thin film magnetism, including new methods of epitaxial growth using surfactants or controlling the morphology at the atomic scale, the identification and characterization of model systems for magnetism in low dimensions, and the observation of magic heights in metallic islands.

Mirkin, Noemi

University of Michigan

International Physics

For her leadership in establishing productive international collaborations, her many achievements in biological molecular physics and for her long service to the interna-tional community as an officer and Executive Committee member of the Forum on International Physics.

Mohammad, Noor

Unknown

Industrial and Applied Physics

For sustained contribution to the development of nanowire technology and ohmic contacts to semiconductors.

Moshchalkov, Victor

Institute for Nanoscale Physics & Chemistry

Condensed Matter Physics

For important contributions to the study of vortex matter and nano-structured superconductors.

Narain, Meenakshi

Brown University Particles and Fields

important contributions to the measurement of the properties of the top quark.

Newman, Mark

University of Michigan

Statistical & Nonlinear Physics

For pioneering work on the statistical physof complex systems, especially the the-and characterization of networks.

Nordlund, Thomas

University of Alabama, Birmingham

Biological Physics

In recognition of his pioneering work in protein dynamics, DNA dynamics and the biological physics

O'Brien, Edward

Brookhaven National Laboratory

Nuclear Physics

For leadership in the construction, operation and continuous improvement of the PHENIX detector since the start of RHIC. notably for the successful implementation of significant annual upgrades of the detector as part of a systematic program to extend its physics reach.

Osterwalder, Jurg

University of Zurich

Condensed Matter Physics

For development of photoemission techniques for surface and solid-state studies, including advances in angleresolved photoemission for Fermi surface mapping and photoelectron diffraction for determining surface structure.

Petty, Clinton

General Atomics

Plasma Physics

For accurate measurements of rf-driven non-inductive current profiles leading to the validation of theory in unprecedented detail, and for innovative developments in heat transport scaling with dimensionless parameters.

Phillips, Richard

Cavendish Lab

Condensed Matter Physics

For contributions to the understanding of coherent quantum optical processes in semiconductors.

Polzik, Eugene

University of Copenhagen

Laser Science

Development of robust light and matter entanglement and their use in teleportation protocols.

Prigodin, Vladimir

Ohio State University

Condensed Matter Physics

For his pioneering studies of electronic properties of lowdimensional systems, proposal and development of fundamentals of charge transport in quasi-one-dimensional disordered structures, and also of operating principals of new organic-based electronic materials/devices and fully spin polarized organic spintronic materials/devices.

Prince, Thomas

California Institute of Technology

Astrophysics

For his broad contributions to the fields of astro-physics and space science, including his leadership role as the LISA Mission Scientist and his service as the Chief Scientist at JPL from 2001 to 2006.

Randeria, Mohit

Ohio State University

Condensed Matter Physics

For seminal theoretical contributions to strongly-correlated superconductors, to the analysis of angle-resolved photo-emission spectroscopy, and to the BCS-BEC crossover.

Rax, Jean-Marcel

Ecole Polytechnique

Plasma Physics

For fundamental contributions to the physics of alpha particles and fast electrons in tokamaks, basic plasma physics, and technological plasmas, and for exceptional lead-

Reining, Lucia

CNRS-Ecole Polytechnique

Computational Physics For her fundamental contributions to ab initio com-

ership in plasma physics administration and education.

putation of spectroscopic properties of solids, employing many-electron Green¿s function time-dependent density functional approaches.

Rezavi. Edward

California State University

Condensed Matter Physics

fundamental theoretical contributions the field of the fractional quantum Hall effect.

Rimmer, Robert

Jefferson Laboratory

Physics of Beams

For advances in the science and technology of RF structures and beam stability in high-current accelerators.

Roberts, Winston

Florida State University

Nuclear Physics

For significant contributions to hadron physics using mod-els of QCD as well as effective field theories and phenomonological Lagrangians, for the development of polarization observables in photoproduced three-body final states, and for continued service to the nuclear science community.

Rost. Jan

Max Planck Institute

Atomic, Molecular & Optical Physics

For seminal investigations of correlated doubly excited states, threshold fragmentation in few-body Coulombic systems and small clusters, pendular states of linear molecules, and for elucidating the role of correlation and relaxation in ultracold plasmas and Rydberg gases.

Rykaczewski, Krzysztof Oak Ridge National Laboratory

Nuclear Physics

his pioneering achieveof ments in studies radioactive nuclei.

Sandvik, Anders

Boston University

Computational Physics

For contributions to the development of quantum Monte Carlo methods and their applicato problems in quantum magnetism.

Schatz, Hendrik

Michigan State University

Nuclear Physics

For his seminal contributions to our theoretical and experimental understanding of the r-process, the rp process, x-ray bursts, and the modification of neutron star crusts by the ashes of nuclear processes.

Schmidt, Michael

Yale University

Particles and Fields

For pioneering work in the technology and analysis of neutral B meson decays at the Tevatron Collider, leading to precision measurements of the mass matrix of the neutral B mesons.

Schuhmann, Reinhardt

American Physical Society, Ridge **APS**

In recognition of his distinguished and dedicated service as an Editor of Physical Review Letters, and for his leadership and advocacy in his position as Managing Editor of Physical Review Letters.

Searson, Peter

Johns Hopkins University

Materials Physics

For advances in the fundamental physics associated with growth at the solid/liquid interface and pioneering work in multifunctional metallic nanowires.

Seebauer, Edmund

University of Illinois Urbana-Champaign

Industrial and Applied Physics

For the discovery of a new suite of physical mechanisms for controlling the behavior of point defects in semiconductors using surfaces, photostimulation and ions, with applications in transistor manufacture for integrated circuits.

Seidel, Edward

Louisiana State University

Computational Physics

putational frameworks and for contributions in the numerical solution of the Einstein equations of general relativity.

Sension, Roseanne University of Michigan

Laser Science

For pioneering work on dynamic in the condensed phase. steady state and ultrafast measurements of excited state dynamics, and optical control of chemical reaction dynamics.

Shapero, Donald

National Academy of Science

Physics and Society

For his seminal contributions in framing the field of physics in a persuasive and compelling manner so as to broaden its understanding and support; and for his dedicated commitment to physics and astronomy through service with the National Academies.

Shelley, Michael New York University

Fluid Dynamics

For his broad-ranging contributions to computational fluid mechanics, including boundary integral techniques for interface dynamics, singularity formation in topological transitions, and fluid-body interactions.

Shih, Chih-Kang University of Texas

Materials Physics

For his original and innovative contributions to the understanding of growth and properties of quantum nanostructures, in particular his pioneering contributions to quantum growth of metal thin films and opcoherence in semiconductor quantum dots.

Singh, Pushpendra

New Jersey Institute of Technology

Fluid Dynamics

For outstanding contributions to the development of efficient algorithms for the direct numerical simulations (DNS) of multiphase fluids, and for using the DNS technique in conjunction with experiments as a tool for understanding the physics of a broad range of multiphase systems.

Smolin, Lee

Perimeter Institute for Theoretical Physics

Gravitation

For his influential contributions to quantum gravand for his tireless outreach efforts to communicate the excitement of contemporary physics to philosophers, artists and the lay public.

Sokolov, Alexei

University of Akron

Polymer Physics

For outstanding contributions in polymer and protein dy-namics including the discovery of a dynamical crossover and the relation between fragility and Poisson's ratio.

Sommers, Paul

Pennsylvania State University

Astrophysics

For his significant contributions to experimental cosmic ray physics, for his major part in designing and building the Pierre Auger Cosmic Ray Observatory, and his leadership role in using it to obtain novel and important insights into the nature and properties of the highest energy cosmic rays.

Spaldin, Nicola

University of California, Santa Barbara

Materials Physics

For her development and implementation of new computational and theoretical tools for computing the properties of complex solids and their application to the rational design and understanding of new multifunctional materials. and for her profound and diverse contributions to Physics education.

Spinka, Harold

Argonne National Laboratory

Nuclear Physics

For his contributions to spin physics and leadership of symmetry experiments at ZGS, LAMPF, AGS, and RHIC.

Sridhar, S Northeastern University

Condensed Matter Physics

on left-handed metamaterials, quantum chaos, vortex and quasiparticle electrodynamics in superconductors,

Stapelfeldt, Henrik University of Aarhus Atomic, Molecular & Optical Physics For his pioneering work in the use of ultrashort laser pulses

For elegant experiments providing seminal insights

and collective excitations in low-dimensional materials.

to align molecules and to study their dissociation dynamics. Stefani, Giovanni

University of Roma **Few-Body Systems**

For his pioneering works in electron-electron coincidence experiments (e.2e) on atoms, molecules and surfaces and the development of innovative instrumentation.

Stoehlker, Thomas GSI Darmstadt

Atomic, Molecular & Optical Physics For significant contributions to the understanding of the

Strassler, Matthew

University of Washington Particles and Fields extending AdS/CFT ity/gauge duality to QCD-like confining theories, and for insights into novel aspects of the phys-

atomic structure and exprocesses of highly charged ions

through precision spectroscopy on few-electron high Zions.

ics of strongly coupled supersymmetric theories.

Streiffer, Stephen Argonne National Laboratory

Materials Physics

For experimental studies of ferroelectric thin film physics. that have established the relationships between epitaxial strain, ferroelectric phase transition behavior and domain structure, and size effects, and for advancing the fundamental understanding of complex oxide thin film microstructure.

Sukhishvili, Svetlana

Steven Institute of Technology

Polymer Physics

For fundamental contributions to the science of polymer monolayers and multilayers adsorbed at water/ solid interface, and for understanding the correlations of polymeric self-assembly in solutions and at surfaces.

Sun. Jonathan IBM T. J. Watson Research Center

Magnetism & Its Applications For his many contributions to the understanding and

application of magnetic and superconducting devices, including those based on spin-momentum transfer and high-temperature superconductivity. Szabo, Attila

Biological Physics

National Institute of Health

For development of the model-independent theoretical analysis of nuclear magnetic resonance relaxation experiments, development of powerful methods to analyze and interpret a range of single molecule experiments, and for major contributions to the theory of diffusion-influenced reactions.

Tahir-Kheli, Raza Temple University

Condensed Matter Physics

Fluid Dynamics For contributions to turbulence, turbulent mixing, vortex dynamics, aerodynamics, thermo-hydraulics, bio-fluid dynamics, and design of flow apparatus and instrumentation. Also, for contributions to education in fluid dynamics and for promoting international collaboration and understanding.

Terhal, Barbara

Tavoularis, Stavros

University of Ottawa

IBM T. J. Watson Research Center

Quantum Information, Concepts & Computation For her fundamental contributions to the theo-

Distinguished for his contributions over a long re-

search career to the theory of condensed matter, par-

ticularly in the fields of magnetism in perfect and dis-

ordered materials and of correlated atomic diffusion.

ry of entanglement, quantum information theand quantum . computational

Terning, John

University of California, Davis

Particles and Fields

For seminal contributions to studies of electroweak symmetry breaking beyond the standard model, and cosmology in extra dimensions.

Terry, James Massachusettes Institute of Technology

Plasma Physics

For significant contributions in the areas of volume recombination in plasmas, plasma impurity transport, wallconditioning with lithium, plasma transport, and plasma turbulence in magnetic fusion confinement devices.

Thadhani, Naresh Georgia Institute of Technology

Shock Compression of Condensed Matter

leadership in shock compresdistinguished service to APS; and impormechanisms. tant research elucidating new

Todd, Alan Advance Energy Systems

Industrial and Applied Physics For his leadership and contributions to the devel-

vances in the understanding of plasma MHD stability. Trbojevic, DeJan

Brookhaven National Laboratory Physics of Beams For his original contributions in the design, commission-

opment and Industrial production of high-average-current particle accelerator components and for ad-

Trudeau, Michel

For his sustained and highly original contributions to the syn-

Inst de Recherche d'Hydro

Industrial and Applied Physics

Tsai, Din Ping

National Taiwan University **Industrials and Applied Physics** For his contributions in nanophotonics, plasmonics

Turneaure, John Stanford University

Ulloa, Sergio International Physics For his contributions to the theory of transport and opti-

shops, and conferences, in particular in Latin America.

Vaccaro, Patrick

Yale University Laser Science

ear spectroscopic techniques to elucidate the structure, dynamics, and chiroptical response of molecules.

Van Schilfgaarde, Mark Arizona State University Computational Physics

Nuclear Physics For seminal work elucidating the parton substructure of nucleons and nuclei at low x.

Verhaar, Boudewyn

Venugopalan, Raju

Brookhaven National Laboratory

For seminal and wide-ranging theoretical contributions to the field of ultra-cold atomic gases.

For the development of electronic structure methods, in particular in computational magnetism, the first all-elec-

Technische Universiteit Eindhoven

Vlasov. Yurii

thesis of metastable and nanostructural materials and the study of their physical properties, with the emphasis in their uses for improved energy efficiency related applications.

and near-field optics especially on near-field scaning optical microscopy, nano storage and nano imaging.

For pioneering the development of ultrahigh-Q superconducting microwave cavities and their application to fundamental physics experiments, and for development of the Gravity Probe B science instrument to test General Relativity.

Precision Measurement and Fundamental

cal properties of low-dimensional semiconductor systems and complex molecules, and his many contributions to international physics as organizer of schools, work-

For the development and application of linear/nonlin-

Statistical & Nonlinear Physics For his seminal contributions to the understanding of the complex Ginzburg-Landau equation, spatioemporal chaos, pattern formation, and front propagation

tron self-consistent quasiparticle GW method and novel implementations of the linear muffin-tin orbital approach.

Atomic, Molecular & Optical Physics

IBM T. J. Watson Research Center

Vvedensky, Dimitri

Imperial College **Materials Physics**

original, sustained, and diverse theoreticontributions toward understanding the morevolution thin of phological epitaxial

Waelbroeck, François

University of Texas **Plasma Physics**

For his work on the effect of velocity shear on ballooning modes, on the formation of current ribbons, and on the effect of the polarization current in magnetic islands.

Weiss, David

Pennsylvania State University

Atomic, Molecular & Optical Physics

For seminal contributions to laser cooling, precision measurements, the study of atoms in optical lattices, and for the experimental implementation of one-dimensional gases.

Westervelt, Robert

Harvard University

Condensed Matter Physics

seminal contributions to our understand-

ing of the quantum behavior of electrons innanoscale semiconductor structures, including imaging the coherent flow of electron waves.

Wheeler, J. Craig

University of Texas, Austin

Astrophysics

In recognition of his work on supernova astrophysics and relatedtopics. Throughouthiscareer, Wheelerhassynthesized disparate areas and thus catalyzed new research directions.

Wisniewski, William Stanford University

Particles and Fields

For outstanding contributions and leadership in the design. construction and operation of the BABAR detector, that have enabled the accumulation of a unique data sample for addressing precision physics in the heavy flavor sector.

Witala, Henryk

Jagellonian University

Few-Body Systems

For his ground-breaking work in solving the threenucleon continuum system using the Faddeev scheme in a numerical accurate manner with realistic nucleon-nucleon and three-nucleon forces.

Xi, Xiaoxing

Pennsylvania State University

Materials Physics

Forhisextensiveandseminalcontributionstothescienceand

superconductors, ferroelectrics, and magnesium diboride.

Yamamoto, Yoshihisa

Stanford University **Atomic, Molecular & Optical Physics**

field opening contributions to quanoptics

applications of thin film materials including high temperature

You, Li

Georgia Institute of Technology

Atomic, Molecular & Optical Physics

For contributions to the theoretical atom-atom inof atomic quantum gases, interactions. teractions. and atom-photon

Zafar, Sufi

IBM T. J. Watson Research Center

Industrial and Applied Physics

For her contribution to the understanding of electrical degradation and charge transport mechanisms in high permittivity and SiO2 dielectric thin films, with a focus on advanced CMOS and memory device applications.

Zakharov, Leonid Princeton University

Plasma Physics

For contributions to the theory and numerical calculation of megnetohydrodynamic equilibria, stability, and transport in toroidal plasma confinement devices and for in-

Weizmann Institute of Science

Condensed Matter Physics

For pioneering experiments that uncovered the nature of vortex lattice melting and elucidated the vortex phase diagram in high temperature superconductors.

novative ideas concerning the development of a lithium

walled tokamak as an approach to an economic reactor.

Zhu, Xiangdong

University of California

Chemical Physics

For innovative study of physical and chemical processes and ultrathin films, including those of biological significance, on solid surfaces, using real-time/ spectroscopic linear and nonlinear optical techniques.

Zippelius, Annette

Universitaet Goettingen

Statistical & Nonlinear Physics

For her many deep, innovative and lasting contributions to statistical physics, especially in the areas of spin glasses, neural networks, vulcanized matter and granular media.

Zolotorev, Max

Lawrence Berkeley National Laboratory

Physics of Beams

For the invention of methods to generate ultra-cold and ultra-fast sources of electron and ion beams using lasers and optical techniques.

Nomination Announcements

Call for Nominations for 2009 APS Prizes and Awards

Nomination Deadline is July 1, 2008, unless otherwise indicated.

PRIZES

Hans A. Bethe Prize

Roland L. Diehl, Max Planck Institut (MPE), Giessenbachstr 1, Garching D-85741, Germany, Phone 49 89 30000 3850 Email

Tom W. Bonner Prize

June L. Matthews, Massachusetts Institute of Technology, Room $26\text{-}433, 77\ Massachusetts\ Avenue, Cambridge, MA\ 02139, Phone$ (617) 253-0111 Email matthews@mit.edu

Herbert P. Broida Prize

R. P. Van Duyne, Northwestern University, Department of Chemistry, 2145 Sheridan Road, Evanston, IL 60208-3113, Phone (847) 491-3516, Fax (847) 491-7713 Email vanduyne@chem. nwu.edu

Oliver E. Buckley Prize

Gregory S. Boebinger, Florida State University, National High Magnetic Field Lab, 1800 East Paul Drive, Tallahassee, FL 32310, Phone (850) 644-0851, Fax (850) 644-9462 Email gsb@ magnet.fsu.edu

Davisson-Germer Prize

Deborah S. Jin, University of Colorado, JILA Campus Box 440, Boulder, CO 80309 Phone (303) 492-0256 Email jin@jilau1.

Einstein Prize

John Friedman, University of Wisconsin, Department of Physics, PO Box 413, Milwaukee, WI 53201, Phone (414) 229-4476, Fax (414) 229-5589 Email friedman@uwm.edu

Fluids Dynamics Prize

Martin Maxey, Brown University, Division of Applied Mathematics, Box F, Providence, RI 02912, Phone (401) 863-1482, Fax (401) 863-2722 Email maxey@cfm.brown.edu

Dannie Heineman Prize

Beverly Berger, National Science Foundation, Physics Division Suite 1015, 4201 Wilson Boulevard, Arlington, VA 22230, Phone (703) 292-7372, Fax (703) 292-9078 Email bberger@nsf.gov

Irving Langmuir Prize

Mostafa A. El-Saved, Georgia Tech, School of Chem & Biochem, Atlanta, GA 30332-0400, Phone (404) 894-0292, Fax (404) 894-0294 Email mostafa.el-sayed@chemistry.gatech.edu

Julius Edgar Lilienfeld Prize

Elizabeth Beise, University of Maryland, Department of Physics, Park, MD 20742, Phone (301) 405-6109, Fax (301 8558 Email beise@umd.edu

James Clerk Maxwell Prize

George H. Neilson, Princeton University, PPPL, PO Box 451, Princeton, NJ 08543, Phone (609) 243-2726, Fax (609) 243-3315 Email hneilson@pppl.gov

James C. McGroddy Prize

Andrew Millis, Columbia University, Department of Physics & Astronomy, 538 W. 120th Street, New York, NY 10027, Phone (212) 854-3336, Fax (212) 854-3379 Email millis@phys.colum-

Lars Onsager Prize

Paul M. Goldbart, University of Illinois Urbana-Champaign, Department of Physics, 1110 W Green Street, Urbana, IL 61801, Phone (217) 333-1195, Fax (217) 333-9819 Email goldbart@

Abraham Pais Prize

Paul Halpern, University of the Sciences in Philadelphia, Department of Math & Phys, 600 S 43rd St, Philadelphia, PA 19104, Phone (215) 596-8913, Fax (215) 895-1100 Email p.halper@usip. edu

George E. Pake Prize

Sharon Glotzer, University of Michigan, Department of Chemical Engineering, HH Dow Rm 3014, 2300 Hayward Street, Ann Arbor, MI 48109, Phone (734) 615-6296 Email sglotzer@umich.edu

W.K.H. Panofsky Prize Harry Nelson, University of California, Santa Barbara, Physics Department, Building 572 Santa Barbara, CA 93106, Phone (805)

893-8612, Fax (805) 893-8597 Email hnn@hep.ucsb.edu Earle K. Plyler Prize

Tomas Baer, University of North Carolina, Department of Chemistry, Chapel Hill, NC 27599-3290, Phone (919) 962-1580, Fax (919) 962-2388 Email baer@unc.edu

Polymer Physics Prize Michael Rubinstein, University of North Carolina, Department of Chemistry, CB 3290 Chapel Hill, NC 27599, Phone (919) 962-

3544, Fax (919) 962-2388 Email mr@unc.edu

I.I. Rabi Prize

Peter Koch, SUNY-Stony Brook, Department of Physics & Astronomy, Stony Brook, NY 11794-3800, Phone (631) 632-8141, Fax (631) 632-8176 Email peter.koch@sunysb.edu

Aneesur Rahman Prize

Gerd Ceder, Massachusetts Institute of Technology, Department of Materials Science and Engineering, 77 Massachusetts Avenue, Cambridge, MA 02139, Phone (617) 253-1581 Email gceder@ mit.edu

J.J. Sakurai Prize

Ben Grinstein, University of California, San Diego, Department of Physics 0319, La Jolla, CA 92093, Phone (858) 534-5229, Fax (858) 534-0173 Email bgrinstein@ucsd.edu

Arthur L. Schawlow Prize

Marjatta Lyyra, Temple University, Physics Department, 1900 North 13th Street, Philadelphia, PA 19122, Phone (215) 204-3776, Fax (215) 204-5652 Email lyyra@temple.edu

Prize to a Faculty Member for Research in an Undergraduate Institution

John F. Mateja, Director of Undergraduate Research, Murray State University, Murray, KY 42071, Phone (270) 762-3191, Fax (270) 762-3181 Email john.mateja@murraystate.edu

George E. Valley Prize

Shelly Johnston, American Physical Society, One Physics Ellipse College Park, MD 20740-3844, Phone (301) 209-3268, Fax (301) 209-0865 Email: johnston@aps.org

Robert R. Wilson Prize

Steve Gourlay, Lawrence Berkeley National Laboratory, MS 50R4049, One Cyclotron Road, Berkeley, CA 94720, Phone (510) 486-1756, Fax (510) 486-6003 Email sagourlay@lbl.gov

AWARDS, MEDALS & LECTURESHIPS

David Adler Lectureship

Zachary Fisk, University of California, Irvine, Department of Physics & Astronomy, Irvine, CA 92697, Phone (949) 824-9883

Leroy Apker Award Alan Chodos, American Physical Society, One Physics Ellipse, College Park, MD 20740, Phone (301) 209-3233, Fax (301) 209-

0865 Email chodos@aps.org

Edward A. Bouchet Award Joseph A. Johnson, CeNNAs, Florida A&M University, 1800-3 Dirac Drive, Tallahassee, FL 32310, Phone (850) 561-2471, Fax

Joseph A. Burton Award

(850) 561-2474 Email Johnsonj@cepast.famu.edu

Valerie Thomas, Georgia Institute of Technology, Industrial and Systems Engineering, 765 Ferst Drive, Atlanta, GA 30332, Phone (404) 385-7254 Email valerie.thomas@isye.gatech.edu

John Dawson Award for **Excellence in Plasma Physics Research**

Uri Shumlak, University of Washington, Box 352250, Seattle, WA 98195, Phone (206) 616-1986, Fax (206) 543-4719 Email shumlak@aa.washington.edu

John H. Dillon Medal

Michael Rubinstein, University of North Carolina, Department of Chemistry, CB 3290, Chapel Hill, NC 27599, Phone (919) 962-3544, Fax (919) 962-2388 Email: mr@unc.edu

George E. Duvall Shock Compression Science Award

Ramon Ravelo, University of Texas, Department of Physics, El Paso, TX 79968, Phone (915) 747-5620, Fax (915) 747-5447 Email ravelo@psci.utep.edu

Joseph F. Keithley Award James R. Matey, Sarnoff Corp, 201 Washington Road, Princeton, NJ 08543, Phone (609) 734-2868 Email jrmatey@comcast.net

Maria Goeppert Mayer Award

Sherry Yennello, Texas A&M University, Cyclortron Institute, College Station, TX 77843, Phone (979) 845-1411, Fax (979) 845-1899 Email yennello@comp.tamu.edu Nicholson Medal

Peter Meszaros, Pennsylvania State University, Department of Astronomy & Astrophysics, 525 Davey Laboratory, University Park, PA 16802, Phone (814) 865-0418 Email pmeszaros@astro.

Francis Pipkin Award Protik Majumder, Williams College, Department of Physics, Williamstown, MA 01267, Phone (413) 597-3211, Fax (413) 597-

4116 Email pmajumde@williams.edu

Leo Szilard Lectureship Valerie Thomas, Georgia Institute of Technology, Industrial and Systems Engineering, 765 Ferst Drive, Atlanta, GA 30332, Phone (404) 385-7254 Email Valerie.thomas@isye.gatech.edu

John Wheatley Award

Jerry Draayer, Louisiana State University, Department of Physics & Astronomy, 202 Nicholson Hall, Baton Rouge, LA 70803-4001, Phone (225) 388-6844 Email draayer@lsu.edu

DISSERTATION AWARDS

Andreas Acrivos Award Paul Steen, Cornell University, Department of Chemical Engineering, Olin Hall, Ithaca, NY 14853, Phone (607) 255-4749, Fax (607) 255-9166 Email: phs7@cornell.edu

Mitsuyoshi Tanaka Award William Ford, University of Colorado, Boulder, Physics Depart-

492-5119 Email wtford@pizero.colorado.edu

ment 390, Boulder, CO 80309, Phone (303) 492-6149, Fax (303)

Marshall Rosenbluth Award Thomas O'Neil, University of California, San Diego, Department of Physics 0319, 9500 Gilman Drive, La Jolla, CA 92093, Phone (858) 534-4176, Fax (858) 534-0173 Email toneil@ucsd.edu

Nuclear Physics Dissertation Award

Richard Casten, Yale University, Phys Dept/Wright Nuc Str Lab, PO Box 208124, New Haven, CT 06520, Phone (203) 432-6174, Fax (203) 432-3522 E-mail rick@riviera.physics.yale.edu

DAMOP Thesis Research Dissertation Award

Prof. Robin Cote, University of Connecticut, Department of Physics U-3046, 2152 Hillside Road, Storrs, CT 06269-3046 Email rcote@wphys.uconn.edu

2007 APS Fellowship Nomination Deadlines

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DIVISIONS

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Astrophysics	04/26/2008
Biological Physics	04/04/2008
Chemical Physics	PAST
Computational Physics	04/04/2008
DAMOP (Atomic, Molecular, Optical)	04/04/2008
DCMP (Condensed Matter)	PAST
Fluid Dynamics	03/29/2008
Polymer Physics	04/04/2008
Laser Science	04/04/2008
Materials Physics	PAST
Nuclear Physics	04/04/2008
Particles & Fields	04/04/2008

Physics of Beams03/15/2008 Plasma Physics04/04/2008

FORUMS

TOPICAL GROUPS

Few Body04/04/2008 Precision Measurement & Fund. Const......04/04/2008 Instrument & Measurement Science04/26/2008

Shock Compression04/04/2008 Hadronic Physics04/26/2008 Gravitation04/04/2008 Magnetism and Its Applications04/04/2008 Statistical & Nonlinear Physics04/04/2008 Plasma Astrophysics04/04/2008 Quantum Information04/04/2008

APS GENERAL

This category is reserved for unusual situations where the contributions of the nominee clearly do not fall into the area of a technical unit. They are reviewed and recommended directly by the APS Fellowship