APS Announces Spring 2004 Prize and Award Recipients

Forty-three APS prizes and awards will be presented during special sessions at three spring meetings of the Society: the 2004 March Meeting, 22-26 March, in Montréal, Quebec, Canada; the 2004 April Meeting, May 1-4, in Denver, CO.; and the 2004 meeting of the APS Division of Atomic, Molecular and Optical Physics, May 25-29, 2004, in Tucson, AZ.

Citations and biographical information for each recipient follow. The Apker Award recipients appeared in the December 2003 issue of *APS News* (http://www.aps.org/apsnews/1203/120302.html).

Additional biographical information and appropriate web links can be found at the APS web site (http://www.aps.org). Nominations for most of next year's prizes and awards are now being accepted. For details, see pages 7 and 8 of this of this insert.

PRIZES

2004 WILL ALLIS PRIZE

John McConkey
University of Windsor, Canada

Citation: *"For his innovative experimental studies of electron collisions with atoms and molecules which have significantly advanced our understanding of collisional and radiative processes in ionized gases at the microscopic level."*

McConkey received his PhD in 1963 from Queen's University, Belfast. Following a year in Paris, he returned to a faculty position at Queen's. In 1970 he was appointed full professor of physics at the University of Windsor where he later became a university professor. His research interests have covered a wide range of topics, particularly involving the collisions of electrons, ions, photons, atoms, molecules and clusters. He has been a major player in the establishment of our current data bank of absolute electron-impact cross-sections.

2004 HANS A. BETHE PRIZE

Wick Haxton
University of Washington

Citation: *"For his noteworthy contributions and scientific leadership in the field of neutrino astrophysics, in particular for his success in merging nuclear theory with experiments and observations in nuclear physics and astrophysics."*

Haxton received his PhD from Stanford University in 1976. He spent a postdoctoral year at Mainz, then seven years in the theory division at Los Alamos. In 1984 he joined the faculty at the University of Washington, where he is currently professor of physics and adjunct professor of astronomy.

He has directed the Department of Energy's Institute for Nuclear Theory since 1991. His research interests include neutrino and nuclear astrophysics, tests of symmetries and fundamental interactions, and techniques for solving manybody problems. He is a member of the collaboration seeking to establish a National Underground Science and Engineering Laboratory.

BIOLOGICAL PHYSICS PRIZE

Peter Wolynes
University of California, San Diego

Citation: "For his conceptual breakthroughs in protein dynamics and protein folding, and his critical insights toward the understanding of how proteins work at the most fundamental level."

Wolynes received his PhD in chemical physics from Harvard University in 1976. After a postdoc at MIT, he returned to the faculty at Harvard. In 1980 he joined the faculty at the University of Illinois, moving to the University of California, San Diego in 2000, where he holds the Francis Crick Chair and is a member of the departments of chemistry and biochemistry and of physics. His research has ranged widely over many areas of theoretical chemistry, physics and biology including theories of chemical reactions and quantum many-body phenomena in liquids and biomolecules and the theory of glasses.

2004 TOM W. BONNER PRIZE

George Bertsch
University of Washington

Citation: *"For his many varied contributions to nuclear-structure and reaction theory, which have guided and illuminated experiments for four decades."*

Bertsch did graduate studies in physics at Princeton University. He completed a thesis in nuclear theory and obtained a PhD in 1965. He held academic positions at Princeton, MIT, and Michigan State University, where he became professor in 1973 and Hannah Professor in 1985. He is presently professor of physics at the University of Washington. His research in nuclear theory began with spectroscopy and particularly giant resonances and went on to the properties of high density matter and their experimental implications. Most recently he has been pursuing the connections between theoretical techniques used in different disciplines.

2004 OLIVER E. BUCKLEY PRIZE

Tom Lubensky
University of Pennsylvania

David R. Nelson
Harvard University

Citation: *"For seminal contributions to the theory of condensed matter systems including the prediction and elucidation of the properties of new, partially ordered phases of complex materials."*

Lubensky received his PhD in physics from Harvard University in 1969. He was postdoctoral fellow at the Universiti de Paris Sud in Orsay (1969-70) and a postdoctoral Research Associate at Brown University (1970-71). In 1971, he joined the University of Pennsylvania, where he is now the Mary Amanda Wood Professor of Physics and chair of the Department of Physics and Astronomy. His early research dealt with thermal critical phenomen. A major focus of his work has been soft materials, especially liquid crystals.

Nelson received his PhD in 1975 in theoretical condensed matter physics from Cornell University. His research focuses on collective effects in physics, materials science and chemistry. He has been interested, in particular, in the interplay between fluctuations, geometry and statistical mechanics. His research includes work on helium films and two dimensional melting. His current interests include vortex physics, the statistical mechanics of polymers, topological defects on frozen topographics and biophysics.

2004 DAVISSON-GERMER PRIZE

Paul Julienne
National Institute of Standards and Technology

Citation: *"For his pioneering studies of the theory of ultracold atomic collisions, and its applications to precision metrology and quantum gas dynamics."*

Julienne earned a PhD in chemical physics from the University of North Carolina at Chapel Hill in 1969. He worked as a postdoctoral research associate at the National Bureau of Standards (NBS) from 1969-1971. He worked with the Plasma Physics Division of the Naval Research Laboratory from 1972-1974. He returned to NBS (now the National Institute of Standards and Technology) in 1974 as a member of the Quantum Chemistry Group, and later became group leader of the Quantum Processes Group in the Atomic Physics Division of the NIST Physics Laboratory. His research interests are in theoretical atomic and molecular physics. Since 1986, his research has centered on cold atom collisions.

2004 DANNIE HEINEMAN PRIZE

Gabriele Veneziano
CERN

Citation: *"For his pioneering discoveries in dual resonance models which, partly through his own efforts, have developed into string theory and a basis for the quantum theory of gravity."*

Born in Florence, Italy, Veneziano pursued his graduate studies at the Weizmann Institute of Science, Rehovot, Israel, where he received a PhD in physics in 1967. He was research associate and then visiting professor at MIT from 1968 to 1972. In 1972, he returned to the Weizmann Institute as fuIl professor. Since 1978 he has been a permanent member of the Theoretical Physics Division at CERN, Geneva, which he headed from 1994 to 1997. His early research was on dual resonance models, the precursor of string theory. Since 1986 he has returned to string theory and, in particuIar, to its cosmological implications.

2004 FRANK ISAKSON PRIZE

James Wolfe
University of Illinois at Urbana-Champaign

Citation: *"For contributions to the fundamental understanding of excitonic matter and ballistic phonons in semiconductors, made possible by pioneering development of graphic imaging techniques."*

Wolfe is a professor of physics at the University of Illinois at Urbana-Champaign and a member of the Frederick Seitz Materials Research Laboratory. He received his PhD in physics in 1972 from the University of California at Berkeley. He joined the Physics Department at Illinois in 1976.

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Wolfe's group at Illinois figured out how to image diffuse clouds of electron-hole droplets and discovered striking anisotropies in droplet transport due to a 'phonon wind'.

2004 JULIUS EDGAR LILIENFELD PRIZE

H. Jeff Kimble
California Institute of Technology

Citation: *"For his pioneering work in quantum optics, for his innovative experiments in single-atom optical experiments, and for his skill in communicating the scientific excitement of his research to a broad range of audiences."*

Kimble is the William L. Valentine Professor and professor of physics at the California Institute of Technology. He completed his doctoral degree in 1977 at the University of Rochester. After spending two years as a staff scientist at the General Motors Research Laboratories, he joined the faculty at the University of Texas at Austin in 1979, where he eventually held the Sid Richardson Regents' Chair of Physics before moving to Caltech in 1989. The general areas of his research activities are quantum information science and the quantum dynamics of open systems.

2004 JAMES C. MCGRODDY PRIZE

Loren Pfeiffer
Lucent Technologies

Citation: *"In recognition of his outstanding innovations in molecular beam epitaxy technology and semiconductor materials design that have changed our understanding of the physics of lower dimensional electron systems.*

Pfeiffer received his PhD in physics from The Johns Hopkins University in 1967. In 1968 he joined the technical staff of AT&T Bell Laboratories in Murray Hill, New Jersey. An early technical highlight in his career was the discovery of the Mossbauer Effect in the isotope Ge-73. In the 1980s he switched his career focus to molecular beam epitaxy (MBE). He designed and fabricated by MBE the first semiconductor laser that operates from the ground state of a quantum wire.

2004 LARS ONSAGER PRIZE

John Cardy
Oxford University

Citation: *"For his profound and original applications of conformal invariance to the bulk and boundary properties of two-dimensional statistical systems."*

Cardy received his PhD in theoretical physics in 1971 from Cambridge University. After postdoctoral studies at CERN, Geneva and the University of Cali-fornia, Santa Barbara, he joined the faculty in 1977. In 1993 he moved to Oxford University, where he is a senior research fellow at All Souls College and a professor of physics. His research interests include applying methods of quantum field theory and the renormalization group to condensed matter, especially to critical phenomena in both pure and disordered equilibrium and nonequilibrium systems.

2004 GEORGE E. PAKE PRIZE

Robert M. White
Carnegie Mellon University

Citation: *"For his visionary leadership as the first Under Secretary of Commerce for Technology, for his outstanding research on the theory of magnetic data storage, and for his leadership at Control Data Corporation and Xerox."*

White is currently University Professor of Electrical and Computer Engineering and director of the Data Storage Systems Center at Carnegie Mellon University. From 1993 until 1999, he served as head of the electrical and computer engineering department. Prior to joining CMU in 1993, he served during the Bush administration as the first Under Secretary of Commerce for Technology. Prior to going to Washington, White spent six years with Control Data Corporation. White's early career was spent in teaching and research. He was assistant professor of physics at Stanford University from 1968 through 1970. He then joined Xerox Corporation's legendary Palo Alto Research Center (PARC), where he spent 13 years as a principal scientist. His current research deals with the origins of noise in magnetic tunnel junctions and spin-transfer induced noise in magnetic thin film structures. White received his PhD in physics from Stanford University in 1984. He is currently a director of the National Science and Technology Medals Foundation.

2004 W.K.H. PANOFSKY PRIZE

Arie Bodek
University of Rochester

Citation: *"For his broad, sustained, and insightful contributions to elucidating the structure of the nucleon, using a wide variety of probes, tools and methods at many laboratories."*

Bodek received his PhD in physics in 1972 from the Massachusetts Institute of Technology. He was a postdoctoral associate at MIT and a Robert E. Millikan Fellow at Caltech. Bodek joined the University of Rochester as an assistant professor of physics in 1977, where he has been serving as chair of the department of physics and astronomy since 1999. Bodek has done extensive research in collider physics including the physics of of W's, Z's, dileptons, W asymmetry, and quark-lepton composites. His research group is currently involved in the CDF, CMS, and Jefferson Lab E03-110 experiments, and in analysis of the CCFR / NuTeV experiments. Bodek is also highly active in physics education and outreach activities, and in efforts to increase the number of under-represented groups in science and engineering.

2004 EARLE K. PLYLER PRIZE

Richard Van Duyne
Northwestern University

Citation: *"For his trailblazing contributions in the fields of Surface Enhanced Raman Scattering and Nanoparticle Optics."*

Van Duyne received his PhD in analytical chemistry from the University of North Carolina, Chapel Hill in 1970. He then joined the faculty of the Department of Chemistry at Northwestern University. In 1986, he was named the Charles E. and Emma H. Morrison Professor of Chemistry. Van Duyne is best known for his discovery of Surface-Enhanced Raman Scattering (SERS) and as the developer of nanosphere lithography (NSL). His current research interests include nanoparticle optics and its application to ultrasensitive chemical sensing and biological sensing, nanoparticle-based photonic devices, and scanning probe microscopy.

2004 POLYMER PHYSICS PRIZE

Timothy Lodge
University of Minnesota

Citation: *"For outstanding contributions to the fundamental understanding of polymer chain diffusion and segmental-chain dynamics."*

Lodge has been on the faculty at the University of Minnesota since 1982, where he is currently a Distinguished McKnight University Professor in the departments of chemistry and chemical engineering and materials science. He earned his PhD at the University of Wisconsin in 1980. He then spent 20 months as a National Research Council postdoctoral fellow at NIST. His research interests center on the structure and dynamics of polymer liquids, including solutions, melts, blends, and copolymers, with particular emphases on rheology, diffusion, and scattering techniques. Currently he is the editor of *Macromolecules*.

2004 ANEESUR RAHMAN PRIZE

Farid Abraham
IBM Almaden Research Center

Citation: *"For his landmark simulations of fracture, 2-d melting and properties of membranes."*

Abraham received his PhD in physics in 1962 from the University of Arizona. He spent two postdoctoral years at the University of Chicago and two research years at the Lawrence Livermore National Laboratory. He joined IBM in 1966. Over four decades he has pursued a wide range of computational physics applications, mainly in condensed matter physics and chemical physics. Abraham created the MAAD simulation project that achieved the seamless union of the continuum, atomistic and electronic structure descriptions of matter for the study of rapid brittle fracture.

2004 J. J. SAKURAI PRIZE

Ikaros Bigi
University of Notre Dame

Anthony Sanda
Nagoya University, Japan

Citation: *"For pioneering theoretical insights that pointed the way to the very fruitful experimental study of CP violation in B decays, and for continuing contributions to the fields of CP and heavy flavor physics."*

Bigi has studied at the Munich, Oxford, Pavia and Stanford with scholarships from the Maximilianeum Foundation and the Scholarship Foundation of the German People. He received his diploma and PhD in 1973 and 1977, respectively, from the University of Munich and his Habilitation in 1984 from the RWTH Aachen. He has worked at the Max-Planck-Institute for Physics, CERN, RWTH Aachen, University of Oregon, SLAC, Fermilab and since 1988 at the University of Notre Dame du Lac. His research has been in the phenomenology of the standard model and of new physics. In unguarded moments he thinks about the meaning of quantum mechanics.

Sanda received his PhD from Princeton University in 1969. He was a research associate at Columbia University (1969-1971), and at Fermilab (1971-1974). During the period of 1974-1992, he worked at Rockefeller University, holding assistant professor, senior research associate, and associate professor positions. Since 1992, he has been a professor of physics at Nagoya University, where he chaired the physics department from 1997-1998, and an associate dean at the Institute for Liberal Arts and Sciences since 2002. His research interests range from strong interaction to weak interaction phenomenology. Having written a paper on large CP violation in B decays, a large fraction of his time has been spent in trying to have some laboratory build a B factory where the prediction can be tested.

2004 ARTHUR L. SCHAWLOW PRIZE

Federico Capasso
Harvard University

Citation: *"For seminal contributions to the invention and demonstration of the quantum cascade laser and the elucidation of its physics, which bridges quantum electronics, solid-state physics, and materials science."*

Capasso is the Robert L. Wallace Professor of Applied Physics at Harvard University, which he joined in 2003 after 26 years at Bell Labs, where he rose from postdoc to vice president of physical research. He holds a PhD degree from the University of Rome, Italy. His research on band-structure engineering of artificial materials and novel devices has opened up new directions in photonics, electronics, mesoscopic physics and nanotechnology. His current research interests include quantum cascade lasers, spintronics, and the investigation of Casimir forces using nanomechanics.

2004 FACULTY MEMBER FOR RESEARCH IN AN UNDERGRADUATE INSTITUTION PRIZE

Nancy Haegel
Fairfield University

Citation: *"For her important contributions to semiconductor materials and semiconductor device physics, and for enthusiastic and sustained involvement of undergraduates in her research efforts at Fairfield University."*

Haegel was associate professor and professor of physics at Fairfield University in Connecticut from 1993-2003. She received a PhD in materials science from the University of California, Berkeley. She worked as a postdoctoral scientist at Siemens Research Laboratories in Erlangen, Germany and then joined the faculty in the Department of Materials Science and Engineering at UCLA in 1987. Effective July 2003, she became professor of physics at the Naval Post graduate School in Monterey, CA. In 1989 she was awarded the TRW Excellence in Teaching Award at UCLA and the Teacher of the Year Award at Fairfield University in 1997.

Haegel's research interests are in semiconductor materials, with emphasis on high resistivity semiconductors and materials for far-infrared detection. She is involved in the development and modeling of photoconductors for use on infrared satellites and interested in new techniques for the optical imaging of electrical transport.

2004 ROBERT R. WILSON PRIZE

Katsunobu Oide
National Laboratory for High Energy Physics (KEK), Japan

John T. Seeman
Stanford Linear Accelerator Center

Citation: *"For technical leadership and direct contributions to the development of high luminosity B-factories at KEK and SLAC. These machines have set new world records for luminosities in colliding-beam storage rings."*

Oide earned his bachelor's degree in pure and applied science from Tokyo University in 1975, and his PhD in physics in 1980. He joined the research staff at KEK the following year, eventually becoming a full professor in 1997. His research involves the design of beam optics for ring colliders and linear colliders. Among his awards and honors is the Nishikawa Prize for linear collider design in 1990 and the Nishina Prize for KEKB in 2001.

Seeman received a PhD in physics at Cornell University in 1979, designing and building the injection system for the CESR e+e- Collider. He served as a research associate in accelerator physics at Cornell from 1979 to 1982 investigating the beam-beam interaction, higher luminosity interaction regions, and storage ring vacuum systems at CESR. Joining the staff of the Stanford Linear Accelerator Center in 1982, he was the Linac System Manager during the construction of the SLAC Linear Collider (SLC) and subsequent operation. He led the effort to minimize the beam emittances in the SLC accelerator. In 2002 he became an assistant director of the technical division at SLAC in charge of accelerator systems.

2004 DAVID ADLER LECTURESHIP AWARD

Chia-Ling Chien
Johns Hopkins University

Citation: *"For his path-breaking research in magnetic nanostructures and for his outstanding mentoring and lecturing in materials physics."*

Chien received his PhD in physics in 1972, from Carnegie-Mellon University. He began as a post-doctoral fellow in physics at the Johns Hopkins University in 1973, and has risen through the ranks to be the Jacob L. Hain Professor in Physics. He is the director of the Material Research Science and Engineering Center at Hopkins. Chien's research is in experimental condensed matter physics, particularly the studies of structural, electronic, magnetic, and superconducting properties of nanostructured solids. He has published more than 300 journal articles and holds several patents. He is one of the 1120 most cited physicists according to the Institute for Scientific Information.

2004 EDWARD A. BOUCHET AWARD

Juan Maldacena
Institute for Advanced Study

Citation: *"For providing a deeper understanding of the correspondence between string theory in d space-time dimensions and Yang-Mills theory in d-1 dimensions, and for communicating fundamental principles of theoretical physics to the general public, including Spanish-speaking audiences."*

Maldacena studied physics at Instituto Balseiro at the Universidad de Cuyo in Bariloche, Argentina. He received his PhD in 1996 from Princeton University. After being an assistant professor at Rutgers University, he went to Harvard as a visiting professor, an associate professor and became a professor of physics in 1999. Currently, he is a professor at the Institute for Advanced Study in Princeton, New Jersey. Maldacena's work focuses mainly on the description of black holes in string theory and on the relation of the large N limit of gauge theories and gravity. He plans to continue exploring this relationship and hopes to shed light on conceptual issues and provide useful analytical tools to tackle such problems.

2004 JOSEPH A. BURTON FORUM AWARD

Peter Zimmerman
Zimmerman Associates

Citation: *"For his outstanding and sustained contributions during his years of service in academia and government to improved public understanding of both nuclear and strategic arms control issues."*

Zimmerman is the professor and chair of Science & Security and the director of the MacArthur Centre for Science & Security Studies at King's College, London—a post he assumed in January, 2004. He previously served as the chief scientist or democratic chief scientist of the Senate Foreign Relations Committee where his responsibilities included nuclear testing, nuclear arms control, cooperative threat reduction and bioterrorism. He organized the Foreign Relations Committee's hearing on "Dirty Bombs" (radiological dispersion devices) in 2002. Zimmerman was the science adviser for arms control in the US State Department during the Clinton Administration. He was professor of physics at Louisiana State University. He has chaired the Forum on Physics and Society and is now APS Councilor representing the Forum on Education. Zimmerman holds a PhD (1969) from Stanford University and a *Filosofie Licentiat* degree from Lunds Universitet in Lund, Sweden (1967), both in experimental nuclear and elementary particle physics.

2004 JOHN H. DILLON MEDAL

Marcus Müller
Johannes Gutenberg University, Germany

Citation: *"For the development of powerful analytic and computational methods, and their application to the structure and dynamics of polymers."*

Müller studied physics at the Johannes Gutenberg University in Mainz, Germany, where he received his PhD *summa cum laude* in 1995 working on structure and thermodynamics of polymer blends. After a TRACS visit at the EPCC Edinburgh, he went as a Feodor Lynen fellow to the University of Washington, where he worked on homopolymer/copolymer mixtures, and on pore formation and, recently, fusion of model bilayer membranes. He returned to Mainz and obtained his Habilitation in theoretical physics in 1999. He is currently Hochschuldozent at the Johannes Gutenberg University, Mainz, and a Heisenberg fellow of the German Science Foundation (DFG). Müller's research interests focus on the phase behavior and interface properties in polymer blends, solutions and amphiphilic systems.

2004 JOSEPH F. KEITHLEY AWARD

Virgil Elings
NanoDevices

Citation: *"For development of scanning probe microscopy through numerous inventions and improvements that led to its commercialization, and for providing a role model of the physicist/ entrepreneur."*

Elings managed to lead a fairly zig-zag path through life ending up as what he calls a lavender and pig farmer. Educationally, he started in a trade high school in Iowa, went into mechanical engineering at Iowa State, and then physics at MIT. He taught at the University of California, Santa Barbara for 20 years. Elings started Digital Instruments in 1987 to make control electronics for these newfangled scanning tunneling microscopes. At the encouragement of UCSB, he quit and did the business thing.

Starting with a personal philosophy that "you can't know what you are doing", they made Digital the world's leader in scanning probe microscope development and manufacturing. It turned out that they didn't know what they were doing, but then neither did anyone else. The path to present atomic force microsopes (AFMs) was as random as the rest of his life.

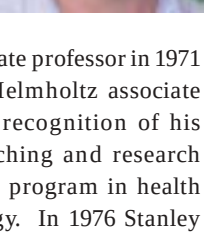
He retired to a ranch to feed his horses, cows and pigs, and try to figure out what to do with 15 tons of lavender every year. AFMs were easier.

2004 MARIA GOEPPERT-MAYER AWARD

Suzanne Staggs
Princeton University

Citation: *"For her original and lasting contributions to experimental cosmology, in particular in the area of cosmic microwave background studies, and for leadership in multi-institutional collaborations to measure CMB anisotropy."*

Staggs received a PhD from Princeton University with a dissertation on a long-wavelength measurement of the absolute temperature of the cosmic microwave background (CMB) radiation. In 1994, she accepted an Enrico Fermi Fellowship at the University of Chicago , and then continued at Chicago for the next two years as a Hubble Fellow, with more work on the CMB. She also spent ten Saturdays in 1996 lecturing on cosmology to the general public as Compton Lecturer. In 1996 she returned to Princeton University as an assistant professor of physics and was promoted to associate professor in 2001. At Princeton, she began work on an experiment to measure the polarization of the CMB.



2004 NICHOLSON MEDAL FOR HUMANITARIAN SERVICE

H. Eugene Stanley
Boston University

Citation: *"For his extraordinary contributions to human rights, for his initiatives on behalf of female physicists, and for his caring and supportive relationship with those who have worked in his laboratory."*

Stanley performed biological physics research with Max Delbruck in 1963 and was awarded a PhD in physics at Harvard in 1967. He was a Miller Fellow at Berkeley before becoming assistant professor of physics at MIT in 1969. He was promoted to associate professor in 1971 and to Herman von Helmholtz associate professor in 1973, in recognition of his interdepartmental teaching and research with the Harvard-MIT program in health sciences and technology. In 1976 Stanley joined Boston University as a professor physics and as an associate professor of physiology in the School of Medicine. In 1978 and 1979, he was promoted to professor of physiology and University Professor, respectively. In 1986 he chaired the triennial IUPAP International Conference on Statistical Mechanics. Stanley pressed for the reform of medical education through the introduction of concepts and techniques of the physical sciences.

2004 LEO SZILARD LECTURESHIP AWARD

Marc Ross
University of Michigan

Citation: *"For his many rigorous, elegant, fearless, and influential analyses of the automobile's energy use, emissions, and crashworthiness that have inspired two generations of policy physicists."*

Ross received his PhD from the University of Wisconsin in 1952. He was a professor of physics at Indiana University, 1955-1963, and professor of physics at the

University of Michigan since. He nominally retired in 2001. His dissertation was in nuclear theory, and he worked in particle theory and as kibbitzer to experimentalists until 1972. He helped organize the 1974 APS study on efficient use of energy, and began work on energy and environmental issues. His initial focus was industrial energy use. Since 1988 he has focused on automobiles. Much of his research concerns fuel-economy technologies. He also analyzed emissions of in use cars and created a model of emissions and driving patterns. Recently he has studied relationships among traffic safety, vehicle mass and other variables in order to evaluate safety effects of potential changes in vehicle design.

DISSERTATION AWARDS

DISSERTATION IN ATOMIC, MOLECULAR OR OPTICAL PHYSICS AWARD

Daniel Steck

Los Alamos National Laboratory

Citation: "*Quantum Chaos, Transport, and Decoherence in Atom Optics*"

Steck received his bachelor's degree in physics and mathematics from the University of Dayton in 1995. He joined the research group of professor Mark Raizen in the Department of Physics at the University of Texas at Austin to perform his dissertation research on the dynamics of atoms in time-dependent optical lattices. These experiments included a quantitative study of the quantum-classical transition due to decoherence as well as the first observation of "chaos-assisted tunneling." He completed his PhD in 2001. He is now a postdoctoral fellow at Los Alamos National Laboratory.

2003 NICHOLAS METROPOLIS AWARD

Frans Pretorius

California Institute of Technology

Citation: "*For innovative developments in numerical relativity including adaptive mesh refinement techniques, black hole excision methods and visualization software for the community.*"

Pretorius was born in Johannesburg, South Africa. He completed his undergraduate degree in computer engineering at the University of Victoria, British Columbia, in 1996. He started his graduate studies at the same institute, and completed a Master of Science in 1999. He obtained his PhD from the University of British Columbia (UBC), Vancouver, in 2002. His thesis work was on numerical simulations of gravitational collapse, and included studies of critical phenomena observed at the threshold of black hole formation, and head-on black hole collisions. After completing his PhD, Pretorius moved to the California Institute of Technology as a postdoctoral fellow. There, he continues to do research in numerical relativity.

2004 NICHOLAS METROPOLIS AWARD

Joerg Rottler

California Institute of Technology

Citation: "*For his innovative research on the simulation and analysis of craze and fracture in glassy materials.*"

Rottler received his PhD in 2003 from the Johns Hopkins University. His thesis was on the deformation and failure of glassy materials, and his advisor was Mark Robbins. He received a diploma in physics in 1999 from the Universität Konstanz in Germany, and was also an Erasmus exchange student at Uppsala Universitet, Uppsala,Sweden in 1996. Rottler is currently a postdoctoral research associate in the Princeton Institute for the Science and Technology of Materials.

2004 DISSERTATION IN NUCLEAR PHYSICS AWARD

Andrew Steiner

University of New York at Stony Brook

Citation: "*For his in-depth studies of the phase structure of dense matter containing quarks, neutrino-quark interactions, superconductivity in quark matter, and in particular for the delineation of the neutrino signals which are likely to reveal the structural components of dense matter.*

Biographical information unavailable at press time.

2004 TANAKA DISSERTATION AWARD

Shahram Rahatlou

University of California, San Diego

Citation: "*For his role in the development of the tools needed for the analysis of B factory data, including the tFIT program, a unique and comprehensive fitting framework for time-dependent analyses. The tools he developed played a key role in the observation of CP violation in the B system by the BaBar collaboration. These tools will be essential to the ongoing program of work as the B factories continue to probe the origins of CP violation.*"

Born in Tehran, Iran in 1974, Rahatlou obtained his "Laurea in fisica" (the Italian undergraduate degree) from Universita` degli Studi di Roma "La Sapienza" in February 1998, with a thesis on the design and implementation of the simulation software for the central drift chamber of the BaBar experiment, which was under construction at SLAC. He joined UCSD in September 1998 as a graduate student to start his study of CP violation with the BaBar experi-ment, and received his PhD in October 2002. He is currently working at UCSD as a postdoc on BaBar. His main research interest is the measurement of the CKM angle gamma of the unitarity triangle. He is also in charge of the reconstruction program of the BaBar experiment.

APS Council Announces 2003 APS Fellows

The APS Council elected the following as Fellows of the Society at its November 2003 meeting. The names and citations of the new APS fellows are listed below. Nominations for fellowship are received by the APS headquarters throughout the year, and are forwarded for review to the appropriate division or topical group fellowship committees. These, in turn, forward their recommendations to the APS Fellowship Committee.

Fellowship nomination forms may be obtained by writing to the APS Fellowship Office, One Physics Ellipse, College Park, MD, 20740-3844, by accessing the APS URL (http://www.aps.org), or by sending an email message to honors@aps.org.

2003 Fellows (Alphabetical by Unit)

Adolphsen Chris Edward
Stanford Linear Accelerator Center
Physics of Beams
For original contributions to the beam physics and microwave properties of high frequency high-gradient linear accelerators.

Aglitskiy Yefim
Naval Research Laboratory
Plasma Physics
For pioneering work in developing monochromatic x-ray imaging technology for diagnostics of laser accelerated plasmas and for experimental studies of ablative Richtmyer-Meshkov instability and Rayleigh-Taylor growth in laser-irradiated targets.

Alarcon Ricardo
Arizona State University
Nuclear Physics
For outstanding contributions to, and leadership in, the development of instrumentation for experiments investigating the fundamental properties of nucleons and few-body systems.

Anderson Richard J
National Science Foundation
APS
For action as Head of the NSF Office of the Experimental Program to Stimulate Competitive Research, which has resulted in significant increase in the academic research culture and competitiveness of many states.

Andrei Eva Y
Rutgers University
DCMP (Condensed Matter)
For outstanding contributions to the experimental study of vortex matter and two-dimensional electron systems, including Wigner lattices.

Arenhoevel Hartmuth
Johannes-Gutenberg Universitat Mainz
Few Body Systems Topical Group
For his contribution in understanding photo-and electrodisintegration of the deuteron, especially with incorporation of isobar degrees of freedom and meson exchange currents.

Balatsky Alexander Vasilievich
Los Alamos National Laboratory
DCMP (Condensed Matter)
For insightful theory of strongly correlated states of matter, particularly unconventional superconductivity and the prediction of impurity-induced quasiparticle bound states.

Barabasi Albert Laszlo
University of Notre Dame
DCMP (Condensed Matter)
For his discovery of scale-free networks and for his theories of surface roughening and strained surfaces.

Barnes Ted
Oak Ridge National Laboratory
Hadronic Physics
For his seminal work on hybrid and exotic hadrons and his contributions to hadron spectroscopy and to the quantum properties of spin systems.

Bauer Wolfgang W.
Michigan State University
Nuclear Physics
For his many contributions to the theoretical understanding and interpretation of heavy-ion collisions, and for his contributions to undergraduate physics education.

Belanger David Peter
University of California, Santa Cruz
DCMP (Condensed Matter)
For investigations of critical behavior near phase transitions in pure, random, and frustrated systems, and for the development of novel optical, neutron scattering, and other techniques to measure such phenomena precisely.

ben-Avraham Daniel
Clarkson University
Statistical & Nonlinear Physics
For contributions to statistical physics on the subjects of the kinetics of diffusion-limited reactions, diffusion and transport in disordered media, and non-equilibrium phase transitions.

Bennett Peter A
Arizona State University
Materials Physics
For illumination of fundamental issues concerning the atomic structure and surface kinetics of metal-silicon systems and their surfaces.

Bernstein Herbert J
Hampshire College
APS
For his outstanding contributions to quantum interferometry and quantum theory including the fermion spinor-rotation experiment and entanglement concentration; and for innovations in teaching, outreach and service through ISIS institute.

Biefeld Robert M
Sandia National Laboratories
Forum on Industrial and Applied Physics
For contributions to MOCVD deposition of compound semiconductors for optoelectronic devices.

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Bohn John L
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Brower David L
University of California, Los Angeles
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Brown Stuart E
University of California, Los Angeles
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Northwestern University
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Campbell Joe Charles
The University of Texas at Austin
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Castor John Irvin
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Castro-Neto Antonio H
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Dionne Gerald Francis
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Ditto William
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Dodelson Scott
Fermi National Accelerator Laboratory
Astrophysics
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Doolen Gary Dean
Los Alamos National Laboratory
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Fitzpatrick Richard
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Hessels Eric A
York University, Canada
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Lawrence Livermore National Laboratory
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The Pennsylvania State University
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Stanford University
Particles & Fields
For his fundamental contributions to the formulation of perturbative string theory, and for his insights into the structure of space-time that string theory provides.

Sherwood Bruce Arne
North Carolina State University
Forum on Education
For pioneering applications of computers in physics instruction, such as PLATO-based mechanics and EM Field, and development of tools for creating such applications, including TUTOR, MicroTutor, cT, and Vpython.

Simon John Douglas
Duke University
Chemical Physics
For pioneering work in the study of dynamical processes in solution and biological systems.

Sinervo Pekka Kalervo
University of Toronto
Particles & Fields
For his important contributions to the discovery of the top quark and the first measurements of its properties, and for his studies of bottom-hadron systems in proton-antiproton collisions.

Singh Surendra P
University of Arkansas
Laser Science
For his original theoretical and experimental contributions to the understanding of quantum noise in lasers and nonlinear optical processes.

Singham Mano
Case Western Reserve University
Forum on Education
For contributions to K-12 teacher education, the development of active learning methods in physics classrooms, and our understanding of the nature of science instruction.

Stahl Frieda Axelrod
California State University, Los Angeles
Forum on History of Physics
For her scholarly contributions to the history of ideas in physics, history of condensed matter physics, and history of women in physics.

Standing Kenneth Graham
University of Manitoba
Topical Group on Instrument & Measurement
For his innovative developments in time-of-flight mass spectrometry, and its application to the measurement of large biomolecules.

Stanton Christopher J
University of Florida
Forum on Industrial and Applied Physics
For theoretical contributions to nonequilibrium phenomena in semiconductors and applications to ultrafast laser spectroscopy.

Stone Howard A
Harvard University
Fluid Dynamics
For pioneering work on the dynamics of complex fluids in small-scale systems.

Strait James B
Fermi National Accelerator Laboratory
Physics of Beams
For his contributions to superconducting magnet technology and his leadership of the US LHC Accelerator Project.

Sundrum Raman
Johns Hopkins University
Particles & Fields
For discoveries in supergravity and in theories of extra dimensions, and for applications to testable models of fundamental physics.

Takayanagi Kunio
Tokyo Institute of Technology
DCMP (Condensed Matter)
For discovering and elucidating the structure of multi-shell magic number 7 radii, helical gold wires and for his contributions to our understanding of the Si(111)7x7 surface.

Tanaka Kazuo A
Osaka University, Japan
Plasma Physics
For outstanding experimental contributions to high energy density plasma physics in the areas of laser-plasma interactions, equation of state, cryogenic implosions, and fast ignition.

Towe Elias
Carnegie Mellon University
Forum on Industrial and Applied Physics
For contributions to the design and application of quantum-dot nanostructures in optoelectronic devices.

Trallero-Giner Carlos L
University of Havana, Cuba
Forum on International Physics
For path breaking efforts bringing Cuban and American condensed matter physics into cooperative working relationships and advancing our knowledge of Raman Scattering and polar modes in nanostructures.

Tringides Michael C
Iowa State University
DCMP (Condensed Matter)
For his pioneering contributions in the elucidation of equilibrium and non-equilibrium adatom diffusion on single crystal surfaces and his discovery of quantum size effects in the growth of Pb islands on Si(111).

Tripathi Ram K
NASA Langley Research Center
Forum on International Physics
For pioneering development of nuclear cross section models used around the world in a wide range of disciplines and applications including space missions and for outstanding contributions to the international physics community.

van der Laan Gerrit
Daresbury Laboratory, United Kingdom
DCMP (Condensed Matter)
For the discovery of the X-ray linear magnetic dichroism and outstanding contributions in the development of X-ray circular dichroism.

Van Orden Jay Wallace
Old Dominion University
Few Body Systems Topical Group
For contributions to the understanding of relativistic effects in few- and many-body nuclei with particular emphasis on covariant calculations of the electromagnetic properties of the deuteron.

Viccaro P. James
University of Chicago
Topical Group on Instrument & Measurement
For his contribution to the development of Synchrotron Radiation Sources, in particular insertion devices and the associated experimental infrastructure which have had a major impact on the fields of Biology, Materials Science, and Physics.

Wambach Jochen
Institute for Nuclear Physics, Germany
Nuclear Physics
For fundamental contributions to many-body theory, especially nuclear collective excitations and the pairing gap in neutron stars, and for calculations which explain the excess dileptons in the CERN CERES experiments.

Wandzura Stephen Michael
Hughes Research Laboratories, LLC
APS
For prediction of spin dependent relations in deep inelastic scattering, contributions to the optics of random and nonlinear media, and the application of the fast multipole method for Maxwell's equations to computational electromagnetics.

Wang Lai-Sheng
Washington State University
Chemical Physics
For his outstanding and innovative contributions to the study of atomic clusters and his pioneering work on multiply charged anions.

Watts Robert Oliver
BHP Billiton Limited, Australia
Chemical Physics
For definitive theoretical and experimental work on the structure of liquids, clusters, and molecular complexes, and for outstanding management of research and development for the global resource industry.

Wefel John P
Louisiana State University
Astrophysics
For measurements of cosmic ray isotopic and elemental composition and interaction cross sections, and efforts to foster astrophysics-related training, public outreach, and education programs.

Wei Jie
Brookhaven National Laboratory
Physics of Beams
For his outstanding and creative contributions to the design and development of RHIC and SNS.

Wessels Bruce Warren
Northwestern University
Materials Physics
For seminal contributions to understanding of defect structure and dopant behavior in epitaxial semiconductor and ferroelectric oxide thin films and heterostructures.

Wettlaufer John S
Yale University
DCMP (Condensed Matter)
For fundamental studies of the molecular basis for crystal growth and the interfacial transitions of ice, and their consequences in large scale phenomena within the natural environment.

Wiegmann Pavel
University of Chicago
DCMP (Condensed Matter)
For exact solutions of models of interacting electronic systems and quantum field theory, including the multi-channel Kondo problem and the Anderson model for magnetic impurities.

Williams Gary Allen
University of California, Los Angeles
DCMP (Condensed Matter)
For experimental and theoretical demonstrations of the role of quantized vorticity in superfluid phase transitions in two and three dimensions.

Williams Philip Karl
U.S. Department of Energy
APS
For his excellent guidance of High Energy Physics university research programs within the Department of Energy.

Williamson Charles H K
Cornell University
Fluid Dynamics
For imaginative, innovative experiments that have injected new life into the study of wake dynamics behind bluff bodies and of trailing vortices.

Winey Karen Irene
University of Pennsylvania
Polymer Physics
For exquisite application of electron microscopy and x-ray scattering to the determination of the microstructure of polymers and to elucidating the role of microdomain geometry on polymer properties.

Winicour Jeffrey
University of Pittsburgh
Gravitational Topical Group
For his numerous contributions to the study of gravitational radiation from strong sources.

Wise Mark Brian
California Institute of Technology
Particles & Fields
For the discovery of heavy quark symmetry in QCD, and the development of heavy quark effective theory.

Wright John Curtis
University of Wisconsin
Chemical Physics
For fundamental contributions to the development, understanding, and applications of multiresonant four wave mixing methods for electronic and vibrational molecular condensed phase spectroscopy.

Xie Aihua
Oklahoma State University
Biological Physics
For her outstanding contributions to experimental studies of protein dynamics, in particular the use of time-resolved infrared studies to probe the dynamics of photosensitive proteins.

Yang Weitao
Duke University
Chemical Physics
For his pioneering contributions to the development of linear-scaling methods for electronic structure calculations and for his fundamental contributions to density functional theory.

Yorke James A
University of Maryland
Statistical & Nonlinear Physics
For seminal contributions to the theory of chaotic dynamics.

2004 APS Fellowship Nomination Deadlines

For submittal information see: http://www.aps.org/fellowship

DIVISIONS

Astrophysics	04/30/04
Atomic, Molecular, Optical	04/16/04
Biological Physics	04/02/04
Chemical Physics	PAST
Computational Physics	04/12/04
Condensed Matter	PAST
Fluid Dynamics	PAST
Polymer Physics	04/16/04
Laser Science	04/02/04
Materials Physics	PAST
Nuclear Physics	04/02/04
Particles & Fields	04/02/04
Physics of Beams	04/02/04
Plasma Physics	04/02/04

FORUMS

Physics & Society	04/02/04
History of Physics	05/01/04
International Physics	04/02/04
Industrial and Applied Physics	PAST
Education	04/16/04

TOPICAL GROUPS

Few Body Systems	04/02/04
Precision Measurement Fund. Const.	04/02/04
Instruments and Measurement	04/30/04
Hadronic Physics	04/30/04
Shock Compression	04/02/04
Gravitation	04/02/04
Magnetism and Its Applications	04/02/04
Plasma Astrophysics	04/02/04
Statistical and Nonlinear Physics	04/02/04

APS GENERAL 06/01/04

NOTE: 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 ASP Fellowship Committee.

Nomination Announcements

Call for Nominations for 2005 APS Prizes and Awards

The following prizes and awards will be bestowed by the Society in 2005. Members are invited to nominate candidates to the respective committees charged with recommending the recipients. A brief description of each prize and award is given below, along with the addresses of the selection committee chairs to whom nominations should be sent. For complete information regarding rules and eligibility requirements for individual prizes and awards, please refer to the Prizes and Awards page on the APS web site at http: / / www.aps.org.

NOMINATION DEADLINE IS JULY 1, 2004, UNLESS OTHERWISE INDICATED.

PRIZES

HANS A. BETHE PRIZE

Send name of proposed candidate and supporting information to: Trevor C Weekes, Smithsonian Astrophysics Observatory; PO Box 97; Amado; AZ 85645-0097; Phone: (520) 670-5726; Fax (520) 670-5739; Email: WEEKES@EGRET.SAO.ARIZONA.EDU

TOM W. BONNER PRIZE

Send name of proposed candidate and supporting information to: Brad Philippone; 106-38 Kellogg Rad Lab; Caltech, 1200 E California Blvd; Pasadena, CA 91125; Phone (626) 395-4517, Fax (626) 564-8708; Email:brad@krl.caltech.edu

HERBERT P. BROIDA PRIZE

Send name of proposed candidate and supporting information to: Ara Apkarian; Dept of Chemistry; University California at Irvine; Irvine, CA 92697-2025 ; Phone: (714) 824-6851; Email: aapkaria@uci.edu

OLIVER E. BUCKLEY CONDENSED MATTER PHYSICS PRIZE

Send name of proposed candidate and supporting information to: Stuart Wolf; Code 6340; NRL; 4555 Overlook Ave SW; Washington DC 20375-5000; Phone: (202) 767-4163; Fax: (202) 767-1697; Email: swolf@darpa.mil

DAVISSON-GERMER PRIZE

Send name of proposed candidate and supporting information to: Randall Feenstra; Dept of Physics; Carnegie Mellon University; 5000 Forbes Ave; Pittsburgh, PA 15213; Phone: (412) 268-6961; Fax: (412) 681-0648; Email: feenstra@andrew.cmu.edu

EINSTEIN PRIZE

Send name of proposed candidate and supporting information to: James Hartle; Department of Physics; University of California; Santa Barbara, CA 93106; Phone: (805) 893-2725, Fax: (805) 893-2902; Email: hartle@cosmic.physics.ucsb.edu

DANNIE HEINEMAN PRIZE

Send name of proposed candidate and supporting information to: Carl Bender; Dept of Physics; Washington University; St Louis, MO 63130; Phone: (314) 935-6216, Fax: (314) 935-6219; Email: cmb@howdy.wustl.edu

IRVING LANGMUIR PRIZE IN CHEMICAL PHYSICS

Send name of proposed candidate and supporting information to: John Weeks; IPST; University of Maryland; College Park, MD 20742; Phone: (301) 405-4802; Fax: (301) 314-9404; Email: idw@ipst.umd.edu

JULIUS EDGAR LILIENFELD PRIZE

Send name of proposed candidate and supporting information to: Allen Goldman; School of Physics & Astronomy; University of Minnesota; 146 Physics; 116 Church Street; Minneapolis, MN 55455; Phone: (612) 624-6062; Fax: (612) 624-4578; Email: goldman@physics.umn.edu

JAMES CLERK MAXWELL PRIZE

Deadline: April 1, 2004

Send name of proposed candidate and supporting information to: William Heidbrink; Dept of Physics & Astronomy; University of California / Irvine; Irvine, CA 92697; Phone: (949) 824-5398; Fax: (949) 824-2174; Email: wwheidbr@uci.edu

JAMES C. MCGRODDY PRIZE FOR NEW MATERIALS

Send name of proposed candidate and supporting information to: Stuart Parkin; IBM Almaden Research Center; 650 Harry Rd K11 / D02; San Jose, CA 95120-6099; Phone: (408) 927-2390; Fax: (408) 927-2395; Email: parkin@almaden.ibm.com

LARS ONSAGER PRIZE

Send name of proposed candidate and supporting information to: Tom Lubensky; Department of Physics; University of Pennsylvania; 209 S 33rd St. Philadelphia, PA 19104; Phone: (215) 898-7002; Fax: (215) 898-2010; Email: tom@physics.upenn.edu

GEORGE E. PAKE PRIZE

Send name of proposed candidate and supporting information to: Gordon Thomas; Department of Physics; New Jersey Institute of Technology; 483 Tiernan Hall; Newark, NJ 07102-1982; Phone: (973) 596-3558; Fax: (973) 596-5794; Email: thomasg@njit.edu

W.K.H. PANOFSKY PRIZE

Send name of proposed candidate and supporting information to: Howard Gordan; Physics Department 510-F; Brookhaven National Lab; Upton NY 11973; Phone: (631) 344-3740; Fax: (631) 344-5568; Email: GORDON1@BNL.GOV

EARLE K. PLYLER PRIZE FOR MOLECULAR SPECTROSCOPY

Send name of proposed candidate and supporting information to: Donald Levy; James Franck Institute; University of Chicago; 5640 S Ellis Ave; Chicago, IL 60637; Phone: (773) 702-7196; Fax: (773) 702-5863; Email: levy@dilly.uchicago.edu

POLYMER PHYSICS PRIZE

Send name of proposed candidate and supporting information to: Dave Weitz; Department of Physics & DEAS; Harvard University; Pierce Hall 29 Oxford; Cambridge, MA 02138; Phone: (617) 496-2842; Fax: (617) 495-2875; Email: weitz@deas.harvard.edu

I.I. RABI PRIZE IN ATOMIC, MOLECULAR AND OPTICAL PHYSICS

Send name of proposed candidate and supporting information to: Tom Gallagher; UVA Physics Dept.; PO Box 400714; Charlottesville, VA 22904; Phone: (804) 924-6817; Fax: (804) 924-4576; Email: tfg@virginia.edu

ANEESUR RAHMAN PRIZE FOR COMPUTATIONAL PHYSICS

Send name of proposed candidate and supporting information to: Sid Yip, Rm 24-208; MIT; Cambridge, MA 02139-4307; Phone: (617) 253-3809; Fax: (617) 258-8863; Email:syip@mit.edu

J. J. SAKURAI PRIZE FOR THEORETICAL PARTICLE PHYSICS

Send name of proposed candidate and supporting information to: Paul Langacker; Department of Physics; University of Pennsylvania; 209 S 33rd St.; Philadelphia, PA 19104; Phone: (215) 898-5943; Fax: (215) 898-8512; Email:PGL@ELECTROWEAK.HEP.UPENN.EDU

ARTHUR L. SCHAWLOW PRIZE

Send name of proposed candidate and supporting information to: Linda Young; Phys Div. 203 F125; Argonne National Lab; 9700 S Cass Ave.; Argonne, IL 60439; Phone: (630) 252-8878; Fax: (630) 252-6210; Email: YOUNG@ANLPHY.PHY.ANL.GOV

PRIZE TO A FACULTY MEMBER FOR RESEARCH IN AN UNDERGRADUATE INSTITUTION

Send name of proposed candidate and supporting information to: Michael Sadler; PO Box 27963; Abilene, TX 79699; Phone: (915) 674-2189; Fax: (915) 674-2146; Email: sadler@physics.acu.edu

GEORGE E. VALLEY, JR. PRIZE

Send name of proposed candidate and supporting information to: Shelly Johnston; Attn: George E. Valley Prize; American Physical Society; One Physics Ellipse; College Park, MD 20740-3844; Email: johnston@aps.org

ROBERT R. WILSON PRIZE

Send name of proposed candidate and supporting information to: Peter Limon; MS 316; Fermilab; PO Box 500; Batavia, IL 60510; Phone: (630) 840-3340; Fax: (630) 840-3756; Email: pjlimon@fnal.gov

AWARDS, MEDALS AND LECTURESHIPS

DAVID ADLER LECTURESHIP AWARD

Send name of proposed candidate and supporting information to: Chris Palmstrom; Department of Chemical Engineering and Materials Science; University of Minnesota; 421 Washington Avenue; SE, Minneapolis, MN 55455; Phone: (612) 625-7558; Fax: (612) 626-7246; Email: palms001@umn.edu

LEROY APKER AWARD

Deadline: June 13, 2004

Send name of proposed candidate and supporting information to: Dr. Alan Chodos; American Physical Society; One Physics Ellipse; College Park, MD 20740; Attn: Apker Award Committee; Phone: (301) 209-3233; Fax: (301) 209-0865; Email: chodos@aps.org

EDWARD A. BOUCHET AWARD

Send name of proposed candidate and supporting information to: David Campbell; College of Engineering; Boston University; 44 Cummington St.; Boston, MA 02215; Phone: (617) 353-2800; Fax: (617) 353-5929; Email: dkcampbe@bu.edu

JOSEPH A. BURTON FORUM AWARD

Send name of proposed candidate and supporting information to: Ken Heller; Department of Physics; 116 Church St S.E.; University of Minnesota; Minneapolis, MN 55455; Phone: 612-624-7314; Fax: 612-624-4578; Email: heller@physics.spa.umn.edu

JOHN H. DILLON MEDAL

Send name of proposed candidate and supporting information to: Frank Bates; Dept. of Chemical Engineering and Materials Science; University of Minnesota; 421 Washington Ave. SE; Minneapolis, MN 55455; Phone: (612) 624-0839; Fax: (612) 626-1686; Email: bates@cmes.umn.edu

ABRAHAM PAIS AWARD FOR HISTORY OF PHYSICS

Send name of proposed candidate and supporting information to: Roger Stuewer; Tate Laboratory of Physics; University of Minnesota; 116 Church Street SE; Minneapolis, MN 55455; Email: rstuewer@physics.umn.edu

JOSEPH F. KEITHLEY AWARD FOR ADVANCES IN MEASUREMENT SCIENCE

Send name of proposed candidate and supporting information to: David Seiler; NIST; TECH / B342; 100 Bureau Drive; MS 8120; Gaithersburg, MD 20899; Phone: (301) 975-2074, Fax: (301) 975-6021; Email:david.seiler@nist.gov

MARIA GOEPPERT-MAYER AWARD

Send name of proposed candidate and supporting information to: Cherry Murray; Bell Labs-Lucent Technologies; Room 1C-224;, 700 Mountain Ave; Murray Hill, NJ 07076; Phone: (908) 582-5849; Fax: (908) 582-3260; Email: camurray@lucent.com

NICHOLSON MEDAL FOR HUMANITARIAN SERVICE

Send name of proposed candidate and supporting information to: Herman Winnick; SLAC Bin 69; Stanford Synch Rad Lab; PO Box 4349; Stanford, CA 94309; Phone: (650) 926-3155; Fax: (650) 926-4100; Email: winick@slac.stanford.edu

FRANCIS M. PIPKIN AWARD

Send name of proposed candidate and supporting information to: Edward Eyler; Dept of Physics U-3046; Univ of Connecticut ; 2152 Hillside Rd; Storrs, CT 06269-3046; Phone: (860) 486-3988; Fax: (860) 486-3346; Email: eyler@phys.uconn.edu

AWARD FOR EXCELLENCE IN PLASMA PHYSICS RESEARCH

Deadline: April 1, 2004

Send name of proposed candidate and supporting information to: Ronald Parker; 3 Essex Road; Belmont, MA 02178-3447; Phone: (617) 258-6662; Email:parker@psfc.mit.edu

SHOCK COMPRESSION SCIENCE AWARD

Send name of proposed candidate and supporting information to: Lalit Chhabildas; 3716 Tewa Dr NE; Albuquerque, NM 87111; Phone: (505) 844-4147; Fax: (505) 845-7003; Email: lcchhab@sandia.gov

LEO SZILARD LECTURESHIP AWARD

Send name of proposed candidate and supporting information to: Ken Heller; Department of Physics; 116 Church St S.E.; University of Minnesota; Minneapolis, MN 55455; Phone: 612-624-7314; Fax: 612-624-4578; Email: heller@physics.spa.umn.edu

JOHN WHEATLEY AWARD

Send name of proposed candidate and supporting information to: David Ernst; Department of Physics & Astronomy; Vanderbilt University; Nashville, TN 37235; Phone: (615) 343-6440; Fax: (615) 343-1103; Email: david.j.ernst@vanderbilt.edu

DISSERTATION AWARDS

ANDREAS ACRIVOS DISSERTATION AWARD IN FLUID DYNAMICS

Deadline: May 1, 2004

Send name of proposed candidate and supporting information to: Sutanu Sarkar, Chair; MS 0411 Dept of MAE; UCSD; 9500 Gilman Dr. La Jolla, CA 92093; Phone: (858) 534-8243; Fax: (858) 534-7599; Email: ssarkar@ucsd.edu

MITSUYOSHI TANAKA DISSERTATION AWARD IN EXPERIMENTAL PARTICLE PHYSICS

Deadline: June 30, 2004

Send name of proposed candidate and supporting information to: Richard Partridge; Dept of Phys.; Brown Univ.; Providence, RI 02912; Phone: (401) 863-2634; Fax: (401) 863-2024; Email: partridge@hep.brown.edu

MARSHALL N. ROSENBLUTH OUTSTANDING DOCTORAL THESIS AWARD

Deadline: April 1, 2004

Send name of proposed candidate and supporting information to: Yu Lin, Physics Department; 206 Allison Laboratory Auburn University; Auburn, AL 36849-5311; Phone: (334) 844-4683; Fax: (334) 844-4613; Email: ylin@physics.auburn.edu