

we hear that

OSA hands out awards, medals

Perserverance, ingenuity, and foresight in the field of optics were recognized in October by the Optical Society of America (OSA) during its 90th annual meeting in Rochester, New York, when it distributed awards, medals, and a prize.

Collecting the Frederic Ives Medal/Jarus W. Quinn Endowment, the society's highest honor, given for overall distinction in optics, was **Erich P. Ippen** "for laying the foundations of ultrafast science and engineering and providing vision and sustained leadership to the optics community." Ippen is a professor of electrical engineering and physics at MIT.

Sang Soo Lee received the Esther Hoffman Beller Medal "for laying the foundation for optical science and engineering in Korea through 40-plus years of teaching and research." Lee is a professor emeritus at and former president of the Korea Advanced Institute of Science and Technology in Daejeon.

The Max Born Award was handed to **Richard E. Slusher**, director of quantum information research at Lucent Technologies' Bell Labs, "for outstanding experimental contributions to quantum optics in squeezed state generation, in microcavity lasers, and in optical pulse propagation through periodic and nonlinear media."

Jean-Claude Diels accepted the Engineering Excellence Award "for his contributions to high-precision measurements (inertial, nonlinear index, and subpicometer displacements) by new phase interferometry using phase-to-frequency conversion inside a mode-locked laser cavity reaching sensitivities of less than 10^{-7} rad." Diels is a professor in the departments of physics and astronomy and of electrical and computer engineering at the University of New Mexico in Albuquerque.

The Joseph Fraunhofer Award/Robert M. Burley Prize was given to **Susumu Noda**, a professor in the electronic science and engineering department at Kyoto University and research director at CREST, Japan Science and Technology Agency, "for fabricating some of the world's most advanced photonic crystals and photonic crystal devices, working uncompromisingly at optical frequencies."

Harrison H. Barrett and **Kyle J. Myers** received the new Goodman Book Writing Award for *Foundations of Image Science* (Wiley, 2004). Bestowed for the first time this year, the award is to be given biannually by OSA and SPIE-The International Society for Optical Engineering, to recognize a recent and outstanding book in the field of optics and photonics that has contributed significantly to research, teaching, or the optics and photonics industry. Barrett is Regents Professor in the college of optical sciences and radiology department; professor of applied mathematics and biomedical engineering; vice chair for research in the radiology department; and director, Center for Gamma-Ray Imaging, all at the University of Arizona in Tucson. Myers is the director of the medical imaging and diagnostics laboratory at the Center for Devices and Radiological Health of the US Food and Drug Administration.

The Nick Holonyak Jr Award was presented to **James J. Coleman** "for a career of contributions to quantum well and strained-layer semiconductor lasers through innovative epitaxial growth methods and novel device designs." Coleman is the Intel Alumni Endowed Chair in Electrical and Computer Engineering at the University of Illinois at Urbana-Champaign.

George H. Heilmeyer was the recipient of the Edwin H. Land Medal, cosponsored with the Society for Imaging Science and Technology, "for the discovery of new electro-optic effects in liquid crystals, and visionary anticipation of today's liquid crystal displays." Heilmeyer is chairman emeritus of Telcordia Technologies in Piscataway, New Jersey.

The Ellis R. Lippincott Award, cosponsored with the Coblentz Society and the Society for Applied Spectroscopy, was handed to **Hai-Lung Dai**, Hirschmann-Makineni Professor of Chemistry and director at the Penn Science Teacher Institute, both at the University of Pennsylvania in Philadelphia. Dai received the award "for seminal studies of structure/dynamics of radicals, highly excited molecules, adsor-

bates and buried interfaces at surfaces through innovative spectroscopic techniques, and for demonstrating extraordinarily efficient transition-dipole-mediated vibrational energy transfer."

John Charles Howell collected the Adolph Lomb Medal "for innovative contributions in quantum optics, particularly to aspects of quantum cloning, violations of Bell's inequalities, and maximal photonic entanglement." Howell is an assistant professor of physics at the University of Rochester.

The William F. Meggers Award went to **Jun Ye** "for the development of innovative spectroscopic techniques based on femtosecond optical frequency combs." Ye is a fellow of JILA and NIST and an associate professor adjoint in the physics department at the University of Colorado at Boulder.

Virginia O. Lorenz, a graduate student research assistant at JILA, received the New Focus/Bookham Student Award for her paper "Non-Markovian Dynamics in a Dense Potassium Vapor," *Physical Review Letters*, volume 95, page 163601, 2005. Lorenz's co-author and thesis adviser is Steven Cundiff of NIST.

The David Richardson Medal went to **Gary S. Duck** for "innovation and leadership in the development and manufacture of optical components and instrumentation for the realization of practical and reliable wavelength-division-multiplexed optical fiber telecommunications systems." Duck is founder and president of Ventana Management Services in Ottawa, Ontario.

Donald I. A. MacLeod received the Edgar D. Tillyer Award "for unparalleled virtuosity in the psychophysical dissection of the visual pathway into the stages that culminate in color, spatial, and temporal vision." MacLeod is a psychology professor at the University of California, San Diego.

The Charles Hard Townes Award was handed to **Orazio Svelto** "for pioneering work on ultrashort laser pulses and solid state lasers, and for the invention of the hollow-fiber compressor, leading to advances in extreme nonlinear optics and attosecond science." Svelto is a professor of quantum electronics at the Polytechnic School of Milan in Italy.

The R. W. Wood Prize was co-awarded to **Louis E. Brus**, **Alexander L. Efros**, and **Aleksey Ekimov** "for the discovery of nanocrystal quantum dots and pioneering studies of their electronic and optical properties." Brus is the Samuel Latham Mitchell Professor of Chemistry and professor of chemical engineering at Columbia University; Efros is a senior researcher at the



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US Naval Research Laboratory in Washington, DC; and Ekimov is principal scientist at Nanocrystal Lighting Corp in Elmsford, New York.

Donald R. Scifres received the John Tyndall Award, cosponsored with the IEEE (Institute of Electrical and Electronics Engineers)/Lasers and Electro-Optics Society, "for seminal contributions to semiconductor laser diode technology that powers the optical fiber networks and as an entrepreneur in creating one of the premier companies that brings to practice the semiconductor diode laser technology to serve the fiber optics industry." Scifres founded and is managing director of SDL Ventures, an investment firm focusing on technology startups, and is chairman of a subsidiary, SDL Capital, both based in Los Altos, California. Scifres received the award last March.

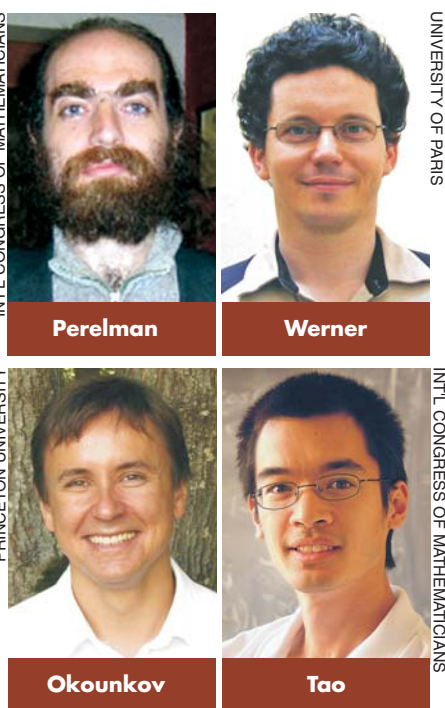
Fields Medals awarded to four

The 2006 recipients of the Fields Medal—considered by mathematicians around the world to be equivalent to the Nobel Prize—were named in August at the International Congress of Mathematicians during a ceremony in Madrid. The International Mathematical Union awards the honors every four years to mathematicians under 40.

For the first time in the prestigious prize's 40-year history, one of this year's recipients turned down the medal and \$9500 purse and declined to attend the August ceremony. **Grigori Perelman**, whose work may have resolved two outstanding problems in topology, the Poincaré conjecture and the Thurston geometrization conjecture, refused the prize after receiving a personal visit and invitation to the ceremony from Sir John Ball, IMU president. Perelman, who last December left his job of some years as a researcher at the Steklov Institute of Mathematics in St. Petersburg, Russia, had been named as a recipient of the medal "for his contributions to geometry and his revolutionary insights into the analytical and geometric structure of the Ricci flow," according to the award citation.

The other three recipients, who accepted their awards and attended the ceremony, are as follows.

Wendelin Werner, professor of mathematics at the Université de Paris-Sud and at the École Normale Supérieure, also in Paris, received the medal "for his contributions to the development of stochastic Loewner evolution, the geometry of two-dimensional Brownian motion,



and conformal field theory."

Andrei Okounkov, a mathematics professor at Princeton University, was named "for his contributions bridging probability, representation theory, and algebraic geometry."

Terence Tao, who won the medal "for his contributions to partial differential equations, combinatorics, harmonic analysis, and additive number theory," is a mathematics professor at UCLA.

obituaries

PHYSICS TODAY has changed the way it publishes obituaries. Some will continue to appear in print, but most will be available only online (see PHYSICS TODAY, October 2005, page 10). Subscribers can visit <http://www.physicstoday.org/obits> to notify the community about a colleague's death and submit obituaries up to 750 words, comments, or reminiscences. Each month, recently posted material will be summarized here, in print. Select online obituaries will later appear in print.

Hershel Markovitz

Hershel Markovitz, emeritus professor of mechanics and polymer science in the department of chemistry at Carnegie Mellon University, died on 29 August 2006 in Jerusalem. He is