Nine Los Alamos National Laboratory Scientists Honored as American Physical Society Fellows

Highest number from Los Alamos recognized by APS in a single year

LOS ALAMOS, N.M.: Nine Los Alamos National Laboratory scientists were selected as Fellows of the American Physical Society (APS). The scientists were recognized for their extraordinary efforts in physics - representing the most Los Alamos physicists selected as APS Fellows in a given year.

The APS Fellowship Program was created to acknowledge Society members who have made advances in knowledge through original research and publication, or offered significant and innovative contributions in the application of physics to science and technology. APS Fellow recognition is a prestigious honor since each year no more than 1/2 of 1 percent of the total American Physical Society membership is elected to the status of Fellow.

"The science at Los Alamos is outstanding," said Terry Wallace, acting principal associate director for Los Alamos National Laboratory's science, technology and engineering directorate. "Since its very beginning, the Laboratory has brought the best scientific talent to work on complex problems of national importance. Many of the individual scientists at the Lab are the leaders in their fields, and it is great that they are recognized, especially by the American Physical Society. To have not one, but nine Lab physicists named as APS fellows speaks to the high level of ground-breaking research and scientific progression taking place at this Laboratory."

The nine Laboratory scientists newly selected to be APS Fellows, along with brief summaries of their backgrounds, are listed below:

Brenda L. Dingus (Neutron Science and Technology) - APS, Division of Astrophysics Dingus was selected for "her pioneering work on understanding the highest energy gamma-ray emission from gamma-ray bursts." Dingus arrived at Los Alamos in 1983 to conduct doctoral research and became a technical staff member in 2002. She earned a bachelor's degree from Harvey Mudd College and a doctorate from the University of Maryland.

Michael R. Fitzsimmons (Los Alamos Neutron Science Center - Lujan Center) - APS, Division of Magnetism and its Application Topical Group

Fitzsimmons was honored for "his work in elucidating the magnetization reversal processes in exchange bias systems using polarized neutron reflectometry." Fitzsimmons came to the Laboratory as a Director's Funded postdoctoral researcher in 1990 and became a technical staff member in 1993.

George T. "Rusty" Gray (Structure and Property Relations) - APS, Shock Compression Topical Group

Gray was selected for "important contributions to the understanding of defect generation and storage in materials subjected to shock loading and for advancing the state-of-the-art of shock

recovery techniques to benefit shock physics." Gray earned his bachelor's and master's degrees in metallurgical engineering from South Dakota School of Mines and Technology and his doctorate in metallurgical engineering from Carnegie Mellon University. He received the Los Alamos National Laboratory Fellow's Prize for Research in 1996 and was appointed a Laboratory Fellow in 2002.

Neil Harrison (National High Magnetic Field Laboratory Pulsed Field Facility): APS, Division of Condensed Matter Physics

Harrison was honored for "pioneering experimentation on the electronic structure and magnetism of strongly correlated electron systems in strong magnetic fields." He came to the Los Alamos Pulsed Field Facility as a postdoctoral researcher in 1996. Harrison earned his bachelor's and doctoral degrees in physics from the University of Bristol and received the Laboratory Fellow's Prize for Research in 2005.

Robert S. Hixson (Shock and Detonation Physics): APS, Shock Compression Topical Group

Hixson was selected for "sustained technical contributions towards dynamic properties measurements on materials of broad scientific importance and vital interest to national defense needs, and for leadership in the field of shock physics." He has a bachelor's degree in physics from California State University at Hayward, a master's degree in physics from the College of William and Mary, and a doctorate in physics from Washington State University. He received the Laboratory's Fellow's Prize for research in 2003 and was appointed a Lab Fellow in 2003.

Philipp P. Kronberg (Institute of Geophysics and Planetary Physics): APS, Division on Astrophysics

Kronberg was honored for "leading the growing appreciation of the importance of astrophysical magnetic fields. His work has helped to define this area of astrophysics and plasma astrophysics." He was the Orson Anderson scholar at the Institute of Geophysics and Planetary Physics from 2002 to 2003, and has remained at the Lab as a limited term technical staff member. He earned his bachelor's and master's degrees from Queens University, Toronto, and doctorate in philosophy and science from the University of Manchester.

Michael A. Nastasi (Center for Integrated Nanotechnologies): APS, Division of Materials Physics

Nastasi earned this honor for "seminal contributions to the fields of ion-solid interactions, including ion enhanced and plasma synthesis of novel materials with applications to energy, manufacturing, nanotechnology, and advanced microelectronics." Nastasi, a nanomechanics thrust leader in the Center for Integrated Nanotechnologies, earned his bachelor's and doctoral degrees in materials science and engineering from Cornell University. He received the Laboratory Fellow's Prize in Research in 1995 and was named a Laboratory Fellow in 2000.

Eddy M. Timmermans (Atomic and Optical Theory): APS, Division on Atomic, Molecular, Optical Physics

Timmermans was selected for "theoretical insights into trapped Ultracold atoms, including novel superfluids in bosonic and fermionic systems, Feshbach resonances and atom-molecule coherence, and resonant light scattering." He came to the Lab as a Director's Postdoctoral Fellow

in 1998, was made an Oppenheimer Fellow in 2000, and became a technical staff member in 2003. He earned his kandidatur (candidacy) in physics from the University of Ghent, Belgium, and his doctorate in Physics from Rice University.

Arthur F. Voter (Theoretical Chemistry and Molecular Physics) - APS, Division on Material Physics

Voter is being honored for "original contributions to the theory of chemical and surface dynamics, especially through the pioneering development of accelerated molecular dynamics." He came to Los Alamos as a postdoctoral researcher in 1983. Voter earned his bachelor's degree at Pennsylvania State University and his doctoral degree at the California Institute of Technology - both in chemistry. He was appointed Los Alamos National Laboratory Fellow in 2003.

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