Two Los Alamos scientists honored with E.O. Lawrence Awards

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Fryer and Dors noted for achievements in space physics, satellite radiation sensors

LOS ALAMOS, N.M., May 21, 2015—Outstanding performance in two vital mission areas resulted in prestigious awards for two Los Alamos National Laboratory scientists this week.

U.S. Energy Secretary Ernest Moniz today announced a select list of U.S. scientists and engineers as recipients of the Ernest Orlando Lawrence Award. The honor is conferred for their contributions in research and development that supports the Energy Department’s science, energy and national security missions.
“This year’s announcement of E.O. Lawrence Awards for two of our staff members serves to confirm the vibrant, mission-critical work being done at Los Alamos,” said Director Charlie McMillan. “Eric Dors, in the area of space-based nuclear nonproliferation, and Chris Fryer, in high-energy and computational multi physics, are outstanding representatives of the capabilities Los Alamos provides in national-security science. We are united with Secretary Moniz in recognizing the essential contributions they have made to global security applications and basic science.”

Since 1959, the Lawrence Award has recognized mid-career scientists and engineers in the United States who have advanced new research and scientific discovery in the chemical, biological, environmental and computer sciences; condensed matter and materials; fusion and plasma sciences; high energy and nuclear physics; and national security and nonproliferation.

“These researchers, now at mid-career, have made significant contributions to the national, economic, and energy security of the United States,” Secretary Moniz said. “I congratulate the winners, thank them for their work on behalf of the Department and the Nation, and look forward to their continued excellent achievement.”

Eric E. Dors - National Security and Nonproliferation: For technical leadership and systems engineering integration of next generation satellite-based nuclear explosion sensing and detection systems, and for its impact to the nonproliferation mission.

Dors is honored for his development of a new generation of exo-atmospheric radiation sensors used to fulfill a critical mission need for satellite-based nuclear explosion monitoring crucial to DOE's nonproliferation mission of global nuclear detonation monitoring and verification of the Limited Test Ban Treaty.

A staff member at Los Alamos since 1998, Dors holds a Ph.D. in Physics from the University of New Hampshire. He specializes in detector and spectrometry development, including space plasma spectrometers for solar wind, magnetospheric, and ionospheric measurements; energetic particle instruments for magnetospheric measurements; and exploitation of new technologies such as MEMS by space-based sensors. He is program manager for Department of Defense and Intelligence Community space programs within the Lab’s Emerging Threats program office. He is author or co-author of 10 scientific papers and the holder of two US Patents.

Christopher L. Fryer - Fusion and Plasma Sciences: For seminal advances in theory and modeling answering fundamental questions in astrophysics, for achievement in computational multiphysics, and for contributions impacting high-energy density science.

Fryer is honored specifically for his major advances addressing fundamental questions in astrophysics, computational multiphysics, and high-energy density science, and more specifically, for supernova core collapse work using 3-dimensional modeling assimilation to model, explain, and predict astrophysical observations (e.g. from NASA’s Swift mission) and phenomena.

Fryer’s computational astrophysics work involving the largest explosions in the universe has impacted some of the most important open questions in astrophysics, including the origin of the elements, the nature and evolution of the first stars, the gravitational wave signals from compact binary systems, and the mechanism responsible for gamma ray bursts.
Fryer is a widely recognized authority in astrophysics and he is an American Physical Society fellow, a former Feynman fellow, and honored as a Los Alamos National Laboratory fellow. He has been at Los Alamos for 15 years.

About the award: The Lawrence Award was originally established by the Atomic Energy Commission to honor the memory of Dr. Ernest Orlando Lawrence, who invented the cyclotron – an accelerator of subatomic particles – and received a 1939 Nobel Laureate in physics for that achievement. Dr. Lawrence later played a leading role in establishing the U.S. system of national laboratories, and today, the Energy Department’s national laboratories in Berkeley and Livermore, California bear his name. The nine Lawrence Award recipients announced today will receive a medal and a $20,000 honorarium at a ceremony in Washington, D.C., later this year.

For more information about the Ernest Orlando Lawrence Award, the complete list of the nine winners nationwide, and the contributions each award recipient has made to U.S. leadership in energy, science and security, please visit http://science.energy.gov/lawrence/.