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Title: Distinguished honors for LANL ASC program associates: E.O. Lawrence Awards and Laboratory Fellow Appointments

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**Distinguished honors for LANL ASC program associates:
E.O. Lawrence Awards and Laboratory Fellow Appointments**

Summary: LANL ASC program associates have been honored as recipients of highly competitive scientific achievement awards. Luis Chacon and Dana Dattelbaum received DOE E.O. Lawrence awards in 2021 and 2020, respectively. Tim Germann, Lin Yin, Ricardo Lebensohn and Hui Li were four of nine LANL Laboratory Fellows appointed for membership in 2022. Each of these awardees has been an influential technical leader in computational sciences impacting both the ASC program and international scientific communities.

The Laboratory Fellows organization was established in 1981 and is made up of technical staff members who have been appointed by LANL's Director to the rank of Fellow in recognition of sustained outstanding contributions and exceptional promise for continued professional achievement.

The Ernest Orlando Lawrence Award was established in 1959 in honor of a scientist who helped elevate American physics to world leadership. The Lawrence Award honors U.S. scientists and engineers, at mid-career, for exceptional contributions in research and development supporting the Department of Energy and its mission to advance the national, economic and energy security of the United States.

E.O. Lawrence Awardees:

Luis Chacon of Applied Mathematics and Plasma Physics (T-5) was selected for seminal contributions in multiscale algorithms for fluid, kinetic, and hybrid simulation of plasmas, enabling scientific breakthroughs in fast magnetic reconnection and self-organization in magnetic fusion systems, and in reactivity degradation in inertial fusion systems.

Dana Dattelbaum of Dynamic Experiments (M-DO) was selected for pioneering physical insights into shock and detonation physics, innovations in the development of Equations of State for energetics and polymers, and critical data for hydrodynamic simulations essential to the National Security programs.

LANL Laboratory Fellows:

Tim Germann of Physics and Chemistry of Materials (T-1) was selected for his distinguished career at the Laboratory, making seminal scientific contributions in a number of computational areas and serving in a number of leadership roles at Los Alamos and nationally. Germann is an internationally recognized authority for three main bodies of work: computational materials science, computational epidemiology and computational co-design.

Lin Yin of the Laboratory's Plasma Theory and Applications group is one of the world's foremost experts on the physics of laser plasma interactions. She was named a fellow for her important discoveries in the physics of laser scattering and energy coupling in inertial confinement fusion experiments on major laser facilities for the weapons program. She has also

made groundbreaking discoveries in laser-driven ion acceleration using high-intensity short-pulse lasers, which have applications in society and national security.

Hui Li of Nuclear and Particle Physics, Astrophysics and Cosmology (T-2) was selected as a fellow for major discoveries in the field of plasma astrophysics. He is recognized as the main person to discover and fully explain Rossby wave instabilities and their role in transporting angular momentum in proto-stellar and protoplanetary disks, one of the most important physics issues in stellar and planetary formation.

Ricardo Lebensohn of Fluid Dynamics and Solid Mechanics (T-3) was named a fellow for his impact and recognition in the field of microstructure and property relationships of polycrystalline materials. His ideas and computational approaches drive the field and influence virtually everyone performing microstructure-aware computational modeling of polycrystalline materials. Lebensohn has had a tremendous impact on the Laboratory's mission and is recognized as an international authority by both the Laboratory and external scientific communities.



Luis Chacon



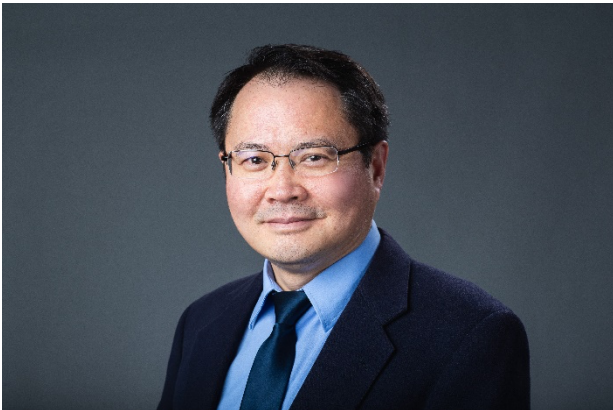
Dana Dattelbaum



Lin Yin



Tim Germann



Hui Li



Ricardo Lebensohn