About the Cover:

Scientist Tim Collins is the lead author in a simulation of shock-driven mixing in a deuterium–tritium saturated fibrous foam. In the image below, the unshocked fibers and DT are seen on the right, while the shock proceeds from the left. Several microns after the shock front, the sharp density distinctions between fibers and DT are seen to become homogenized through effective mixing. Full-scale simulations of wetted-foam ICF target implosions may thus treat the foam layer as a homogeneous medium.



This report was prepared as an account of work conducted by the Laboratory for Laser Energetics and sponsored by New York State Energy Research and Development Authority, the University of Rochester, the U.S. Department of Energy, and other agencies. Neither the above named sponsors, nor any of their employees, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, mark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring

Printed in the United States of America Available from National Technical Information Services U.S. Department of Commerce 5285 Port Royal Road Springfield, VA 22161

Price codes: Printed Copy A05 Microfiche A01 by the United States Government or any agency thereof or any other sponsor. Results reported in the LLE Review should not be taken as necessarily final results as they represent active research. The views and opinions of authors expressed herein do not necessarily state or reflect those of any of the above sponsoring entities.

The work described in this volume includes current research at the Laboratory for Laser Energetics, which is supported by New York State Energy Research and Development Authority, the University of Rochester, the U.S. Department of Energy Office of Inertial Confinement Fusion under Cooperative Agreement No. DE-FC03-92SF19460, and other agencies.

For questions or comments, contact Ansgar W. Schmid, *Editor*, Laboratory for Laser Energetics, 250 East River Road, Rochester, NY 14623-1299, (585) 275-3541.

Worldwide-Web Home Page: http://www.lle.rochester.edu/