

Section 3

NATIONAL LASER USERS FACILITY NEWS

National Laser Users Facility (NLUF) activity during the first quarter of FY87 centered on an experiment that could be carried out while improved optics were being installed in the OMEGA laser, support for future user experiments, and preparing for FY88 proposals. Experiments of **Dr. J. G. Jernigan** from the Space Sciences Laboratory at the University of California, Berkeley, and **Prof. J. S. DeGroot** from the University of California, Davis, were supported during this quarter.

Dr. F. Marshall of LLE is collaborating with Dr. Jernigan on the development of a two-dimensional active readout array to replace film in an x-ray pinhole camera mounted on the OMEGA target chamber. Images were recorded with the 10×64 element PIN diode array and the data are now being analyzed.

Prof. DeGroot visited LLE on 10 November 1986 to talk to LLE personnel about upcoming plasma physics experiments on GDL and OMEGA. It was decided that the experiment to measure the wavelength scaling of ion acoustic decay instabilities will be done on both GDL and OMEGA. Experiments planned for OMEGA will require laser power densities of 3×10^{16} W/cm² incident onto both glass and CH spherical targets. This high-power density is needed to study the ion acoustic decay instability. Instrumentation for this experiment is being installed on the OMEGA target chamber.

The Steering Committee to review the FY88 proposals has been approved by DOE. Its members include

Dr. Dwight Duston OSD/SDIO;
Dr. Peter Eisenberger EXXON Research and Engineering Co.;
Dr. Damon Giovanielli Los Alamos National Laboratory;
Dr. William Kruer Lawrence Livermore National
Laboratory;
Dr. David Nagel Naval Research Laboratory; and
Prof. Ravindra Sudan Cornell University.

The Steering Committee will be chaired by **Provost Brian Thompson** of the University of Rochester. There are 11 FY88 proposals for the committee to review and evaluate.

For more information regarding proposal guidelines and the resources available at the National Laser Users Facility, please contact:

Manager
National Laser Users Facility
Laboratory for Laser Energetics
University of Rochester
250 East River Road
Rochester, New York 14623-1299
(716) 275-2074

ACKNOWLEDGMENT

This work was supported by the U.S. Department of Energy Office of Inertial Fusion under agreement No. DE-FC08-85DP40200.