1979

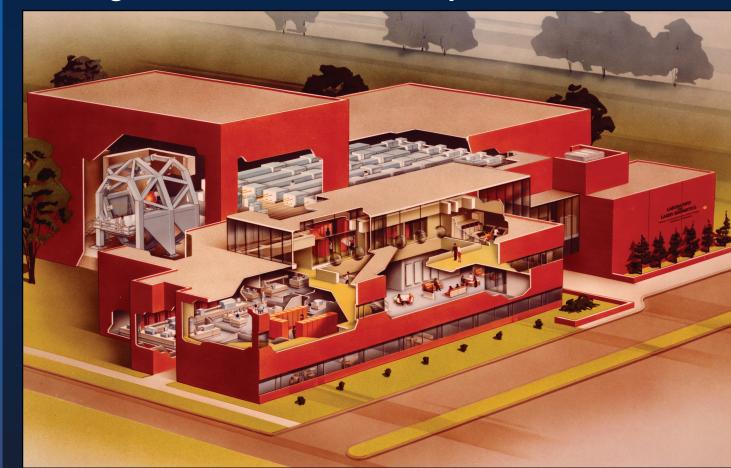
DT Implosion Experiments



ZETA laser target
chamber withBill Watson

LLE conducted a series of DT implosion experiments on the six-beam ZETA laser with all shots producing yields in excess of 1.5 billion neutrons.

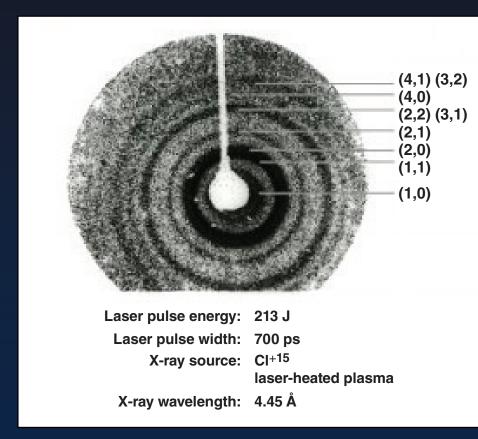
Ultrahigh-Power Lasers Workshop



Rendering of LLE

A workshop was held at LLE to discuss applications of ultrahigh-power lasers in areas beyond fusion. The assembled panel of experts concluded that there are important applications of these systems: chemistry, biology, equation-of-state studies, effects on materials, and high-energy-density physics.

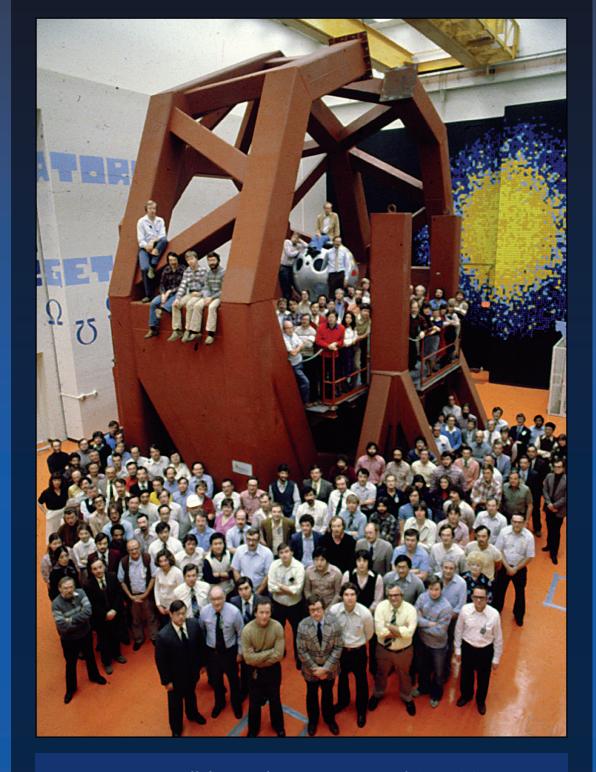
National Laser Users Facility (NLUF) Established



X-ray diffraction pattern of halobacterium halobium taken with subnanosecond exposure on the GDL system by Jim Forsyth as part of an early NLUF experiment

The National Laser Users Facility (NLUF) was established in 1979 to provide access to LLE's high-power laser facilities to U.S. scientists. It was the first user facility based on a high-power fusion laser that provides a unique high-energy-density—physics experimental facility to this nation's scientific community. NLUF participants have included scientists from approximately 40 universities, government laboratories, and private companies. NLUF is another aspect of the LLE program that contributes to its unique position among this nation's inertial confinement fusion laboratories. NLUF serves as a model for the National Ignition Facility users' programs.

24-Beam OMEGA Construction



LLE staff during the construction of OMEGA

The LLE staff was augmented during the OMEGA design and construction project with engineers and technologists from the Eastman Kodak Co. The joint OMEGA project team produced a highly effective and flexible experimental facility that stood the test of time and produced important results in the inertial confinement fusion program. Shown in this photograph is the full laboratory staff including Kodak staff in the OMEGA target area during its construction (December 1979).

