

## Cover Photos

Top left: LLE continues to make strides in pursuit of the perfectly formed target. A shroud cooler has been installed in the Fill/Transfer Station 1 (FTS-1). Accessing the chamber in which targets are filled with hydrogen isotopes occurs infrequently and is complicated to carry out. Mark Romanofsky, seen here under the dome, is fine-tuning the installation of the shroud cooler and guide-rail plates.

Top right: The pulse stretcher for the ultra-broadband front-end project, partially visible in the lower-left corner of this photo, uses gratings and cylindrical Öffner mirrors to stretch 200-nm pulses to 750 ps before they are amplified. Matt Millecchia and Jake Bromage are shown here using the Faro arm to position the stretcher optics before finely aligning the front end of the laser.

Middle left: The High School Summer Research Program completed its 23rd year at LLE with 16 high school students investigating real-world problems while being supervised by scientists and engineers at the Laboratory. In this photo Madeline Rutan of Penfield High School is shown examining a glass sample coated with a layer of abrasion-resistant sol-gel.

Center: LLE is exploring several advanced ignition concepts that can be tested at the National Ignition Facility in the coming decade. A calculated isodensity plot of the core of a polar-drive-ignition target as modeled by the code *DRACO* is shown here.

Middle right: Although periodic safety inspections are carried out at the Omega Laser Facility, special attention is paid to any major upgrades within the systems. Here, Matt Moore (left) is shown describing the upgrade of OMEGA EP's infrared alignment table to Doug Jacobs-Perkins, LLE's Chief Safety Officer.

Bottom: The third annual Omega Laser Facility Users Group (OLUG) Workshop was held at LLE in May 2011. Here, LLE Director Dr. Robert L. McCrory, a strong supporter of OLUG since its inception, welcomes the Users and talks about the evolving capabilities of the Omega Laser Facility that keep it at the cutting edge of research.

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