Cover Photos

Top left: OMEGA EP firing all four high-energy UV beams on a target shot along with a 4ω probe beam located inside the housing on the right. The green light comes from the frequency-doubled light remaining after frequency conversion of the primary beams from the infrared to the ultraviolet.

Bottom left: Photograph of the new high-precision neutron temporal diagnostic (NTD) being installed on OMEGA. The NTD measures the time history of the neutrons produced in OMEGA fusion-target experiments.

Top right: A channel formed in a plasma with a high-intensity OMEGA EP beam is imaged using the new OMEGA EP fourth-harmonic probe laser beam and an angular filter refractometer.

Center right: Steve Jacobs and Brittany Taylor examining a color-coded map of optical rotary power taken of a striped distributed polarization rotator. The device consists of a liquid crystal fluid confined between glass substrates.

Bottom right: Brighton High School student Erin Wang is shown preparing to disconnect the main gas line that feeds deuterium into a cryogenic calorimetry cell. The calorimeter measures the amount of heat flowing when the deuterium melts and freezes. In its 25th year, LLE's Summer Research Program for High School juniors has had 312 participants, 94 of whom have already attained advanced degrees.

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