

Abstract Submitted
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HED physics opportunities on OMEGA/OMEGA EP DAVID MEYERHOFER, Laboratory for Laser Energetics, University of Rochester — The 60 beam, 30 kJ, OMEGA laser facility has been operating at the University of Rochester for more than a decade. The OMEGA EP laser facility adjacent to it will be completed in Q3FY08. OMEGA EP will consist of four beamlines with NIF-like architecture. Each of the beams will ultimately produce 10 ns 6.5 kJ energy ultra-violet pulses directed into the EP target chamber. Two of the beamlines will also operate as high energy petawatt (HEPW) lasers, with up to 2.6 kJ each in 10 ps IR pulses. The HEPW beams can be injected into either the EP chamber or the existing OMEGA target chamber for integrated experiments. This talk will describe the OMEGA EP project status, HED physics possibilities on the combined system, and opportunities for external user access. The ongoing OMEGA EP Use Planning process will be described. This work was supported by the U.S. D.O.E Office of Inertial Confinement Fusion under Cooperative Agreement No. DE-FC52-08NA28302.

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