

The Art of Designing and Fielding Relevant HEDP Experiments

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Abstract

Over the past 20 years I have been involved in over 500 HEDP and ICF experiments performed on the NOVA, OMEGA, and NIF lasers and on the Z pulsed power machine. These experiments investigated hydrodynamic shocks and jets, radiation hydrodynamics, opacities, laser plasma instabilities, etc. This talk will discuss my view of what makes a successful HEDP experiment. That is, what in the design and fielding of these experiments makes them successful and relevant and what causes failures.