

Poster Sessions in the 16th Annual Omega Laser Users Group Workshop, 20-22 May 2025

(U.S. Eastern Daylight Time)

Wednesday, 21 May 2025

10:30 – 12:00 Poster Session 1

#	<u>Name, Institution</u>	<u>Title</u>	<u>Category</u>
1	Armstrong, UR	Studying Biermann-Generated Magnetic Fields in a Cylindrically	Graduate Student
2	Ames, LANL	Light-to-heavy Richtmyer-Meshkov instability experiments on the NIF	Graduate Student
3	Bo, Houghton U	Detecting Short-lived Isotopes Outside the OMEGA-60 Target Chamber Milliseconds After a High-Yield Shot	Undergraduate Student
4	Buschmann, MIT	Diagnosing Signatures of the 3He Build-Up in Cryo-DT Implosions at OMEGA	Graduate Student
5	DeVault, MIT	Studies of Shock-Front Non-Uniformities in Wetted Foams with	Graduate Student
6	Feinberg, UMich	Modeling conditions of radiative heat waves in the Xflows NIF experiment	Graduate Student
7	Foo, MIT	A diagnostically-accessible OMEGA platform for studying non-Maxwellian ion velocity distributions in ICF-relevant conditions using Thomson scattering	Graduate Student
8	Gerbsch, GA Julie Fooks, LLE	The NLUF 4-Gate System: An Overview of Ordering Target Components Through General Atomics	Mid-Career LLE
9	Golovkin	VISRAD, 3-D Target Design and Radiation Simulation Code	Late Career
10	Klein, UCLA	Utilizing Automatic Differentiation and Superposition of Maxwellian VDFs to fit Thomson Scattering Spectra	Undergraduate
11	Landsberger, PPPL	2-D Kinetic Simulations of Biermann-battery Magnetic Field Generation and Current Sheet Formation in Laser-Ablated Plasmas	Graduate Student
12	LeFevre, UMich	Radiation hydrodynamics in strongly coupled plasma on the Omega-60 laser	Early career
13	Leung, UDelaware	Designs for EP-experiments on the collimation of magnetized laser-driven plasma using AI optimization	Graduate Student
14	Luoma, Cornell	Ion Acceleration in Microstructured Targets	Graduate Student
15	Moczulski, UR	Numerical simulations studying the interplay of small- and large-scale turbulent dynamo	Graduate Student
16	Mohapatra, UR	Hall-MHD Fluctuation Dynamo in Driven Turbulence	Graduate Student
17	Nguyen, MIT	Modulated deuteron spectra observed with the Magnetic Recoil neutron Spectrometer at the National Ignition Facility	Undergraduate Student
18	Pomraning, Princeton	Relativistic Particle Acceleration due to Magnetically Driven Reconnection using Laser-Powered Capacitive Coils	Graduate Student
19	Poole, LLNL	Supersonic Turbulent Dynamo in Laser-Driven Plasma	Postdoc
20	Rovere, UCSD	Simulations of LPI-generated hot electrons with an applied external magnetic field	Postdoc
21	Rudnick, MIT	Developing an Improved System for Scanning CR39	Early career
22	Schell, UMich	Michigan Target Research and Fabrication (MiTRF)	Early career
23	Settle, UR	Characterization of an Electron Spectrometer for Laser Wakefield Experiments	Graduate Student
24	Sicard, LLNL	Development of an Activation-Based Diagnostic for Measurement of Laser-Driven Ion Sources for Ion Fast Ignition Experiments	Graduate Student
25	Streeter, Sydor	High Voltage Pulse Generators and Custom Diagnostics Supporting Experiment Operations and Research	Early career
26	Vargas, MIT	Investigations of Multi-ion and Kinetic Effects in High-Z doped laser-direct-drive Inertial Confinement Fusion implosions at OMEGA	Graduate Student
27	Whitfield, UMich	PI-Fronts Experiments with a Laser-Driven Cu Source on OMEGA	Graduate Student
28	Wink, MIT	Diagnosing alpha-heating in NIF implosions through alpha-knock-on neutron (AKN) measurements using the MRS	Graduate Student

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16:10-17:40 Poster Session 2

#	<u>Name, Institution</u>	<u>Title</u>	<u>Category</u>
1	Bhutwala, PPPL	Preliminary Results on Proton Beam Focusing and Heating using a Modular Target Approach	Postdoc
2	Bolanos, UCSD	Experimental Characterization of Proton Transport and Heating in the Context of Proton Fast Ignition	Postdoc
3	Cracium, LLE	An Introduction to Target Deployment Systems for NSF OPAL	Early Career
4	Cufari, MIT	Electron Transport and Capsule Charging in Directly Driven Magnetized Implosions	Graduate Student
5	Dannhoff, MIT	Investigation of the impact of self-generated fields on plasma flow and interface dynamics in foam-lined targets on OMEGA	Graduate Student
6	Dwyer, LANL	An Experimental Campaign for Inferring Hot-Spot Dynamics from Nuclear Reaction History Measurements at the OMEGA-60 Laser Facility	Graduate Student
7	Erez, LLE	Laying The Foundation for Magnetized Warm Dense Matter Experiments	Graduate Student
8	Evans, MIT	Studies of multi-ion and kinetic effects in shock-driven implosions with mid-Z gas fills at OMEGA	Graduate Student
9	Guberman, UMich	Precision Laser Cutting Techniques for High-Energy Density Physics Target Fabrication	Undergraduate
10	Gulis, Prism	MERL line shape library for PrismSPECT and Spect3D simulations	Mid-Career
11	Kalem, UMich	Harnessing Ionization Injection for Direct Laser Acceleration of Electrons	Graduate Student
12	Kelso, UMich	Streak Camera Characterization at the OMEGA-60 Laser Facility	Graduate Student
13	Lawrence, MIT PSFC	Characterization of Self-Generated E and B Fields in Direct Drive ICF Coronae	Graduate Student
14	Liu, LLE	Temperature and x-ray diffraction measurements along the high-pressure Ta melting curve	Undergraduate
15	Martin, Stanford	Measuring the equation of state of directly-driven polymer foam capsules via X-ray fluorescence spectroscopy and Thomson scattering at OMEGA	Graduate Student
16	McMullan, UR	FLASH Simulations of Laser-Driven Experiments to Investigate Heat Transport in Astrophysical Magnetized Turbulence	Graduate Student
17	Nedbailo, UT Austin	Proton Focusing and Heating of Warm Dense Matter at OMEGA-EP	Graduate Student
18	Nijem, ManTech	ManTech Target Fabrication Capabilities	Mid-Career
19	Orr, PPPL	Characterization of Laser-produced Colliding Jet Simulations Towards a Synergistic Relationship with Experiments	Graduate Student
20	Peranidze, MIT	Fast Recursive Forward Model for Field Characterization Using Proton Radiographs	Undergraduate
21	Samimy, UCSD	Experimental Study of Proton Heating in Proximally Structured Cu Foam Targets	Graduate Student
22	Schwartz, MIT	The MIT HEDP Accelerator Facility for Diagnostic Development for OMEGA, Z, and the NIF	Postdoc
23	Shahina, MIT	Nuclear astrophysics experiments using high energy density plasmas	Postdoc
24	Spiers, UDelaware	Spherical compression of a magnetic field in magnetized implosions	Graduate Student
25	Sutardja, UCLA	Quasi-Parallel Shocks on the NIF	Graduate Student
26	Tafoya, UMich	Constraining spectral features of reconstructed neutron images using 1D detectors	Graduate Student
27	Tian, UDelaware	The bending mechanism of coronal outflows due to magnetic topology	Graduate Student
28	Vanderloo, MIT	Ion Weibel filaments: kinetic simulations in support of laser-driven experiments at OMEGA	Graduate Student
29	Zhang, Princeton	Determining Magnetic and Electric Field Generations in Laser-Driven Coil Targets	Postdoc
30	Zuhric, UMich	Undergraduate Student Involvement in Michigan Target Research and Fabrication (MiTRF)	Undergraduate