

Poster Sessions in the 14th Annual Omega Laser Users Group Workshop, 26 - 28 April 2023

(U.S. Eastern Daylight Time)

Wednesday, 26 April 2023

13:45 – 15:45 Poster Session 1

#	Name, Institution	Title	Category
1	Adams, SNL	Modeling efforts to study preheat-induced mixing in Magnetized Liner Inertial Fusion	Postdoc
2	Adrian, MIT	Studying particle and energy transport in HED plasmas	Grad student
3	Armstrong, UR	Driven-Turbulence Simulations of High-Energy-Density Plasmas	Grad student
4	Bachmann, UR	Effective Dissipation in Collisionless Gravitating Systems: Phase Mixing and Landau Damping in the Astrophysical Regime	Grad student
5	Benkadoum, EP	Magnetized Radiative shocks: their role in global evolution of interstellar medium	Grad student
6	Bolanos, UCSD	Laboratory study of the initial stages of a quasi-parallel collisionless shock in a weakly magnetized environment	Postdoc
7	Bruhaug, LLE	Laser-Plasma-Accelerator-Driven Electron Radiography on the OMEGA EP Laser	Grad student
8	Burggraf, LLNL	Resistive Heating of Cu Foils to Nuclear Relevant Temperatures	Postdoc
9	Buschmann, UCI	Measuring Ion Temperature from Thomson-Scattered Spectra of Non-Maxwellian Velocity Distributions in Magnetized Collisionless Shocks	Undergrad student
10	Camdzic, LANL	Improvements on spectroscopic analysis code for spatially-resolved x-ray absorption data from the COAX platform	Grad student
11	Contreras, UM	Measuring Coulomb Explosion Ions from OMEGA EP Interactions	Grad student
12	Cordova, UCSD, LLNL	Developing experimental platform to benchmark x-ray fluorescence spectroscopy as a temperature diagnostic for HED plasmas	Grad student
13	Dannhoff, MIT	Investigations of plasma flow and interface dynamics in Ta ₂ O ₅ - and SiO ₂ -lined hohlraums at OMEGA	Grad student
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15	Dick, UM	Computational investigation of viscous Richtmyer-Meshkov growth and corrugated shock decay in MgO at high pressures	Grad student
16	Evans, MIT	Studies of kinetic/multi-ion-fluid effects in DT ₃ He (with Kr dopant) gas-filled shock- and ablatively-driven implosions	Grad student
17	Farmakis, LLE	Investigation of converging ultra-fast jets in cylindrical implosions: A new platform to study complex hydrodynamic effects relevant to inertial confinement fusion	Grad student
18	Fein, SNL	Novel platforms on Omega and Omega-EP to study preheat-induced mix in Magnetized Liner Inertial Fusion	Scientist
19	Feinberg, UM	Characterization of halfraum output for radiation flow experiments	Grad student
20	Fischer, Safran R&T	Pico Second Timing for High Energy Facilities	VP, industry
21	Foo, PU	Characterization of non-Maxwellian velocity distribution functions with collective Thomson scattering	Undergrad student
22	Frank, UD	Simulations Using LILAC-MHD to Model the Nernst Effect in MagLiner-23A Experiments on OMEGA	Grad student
23	Gallardo-Diaz, UNR	Kr K-shell spatially resolved x-ray spectroscopy as a plasma diagnostic for hot implosion cores	Grad student
24	Garcia Rubio, LLE	Stability of perpendicular MHD shocks in materials with ideal and non-ideal EoS	Scientist
25	Marco & Raka, LLE	DEI	
26	Griff-McMahon, PU	Absolute measurement of Biermann-battery magnetic fields using Proton Radiography with in-situ x-ray fiducials	Grad student
27	Hansen, UR	Simulating Z-pinchs with the FLASH Code	Scientist

Wednesday, 26 April 2023

16:00 – 18:00 Poster Session 2

#	Name, Institution	Title	Category
1	Johnson, MIT	Biermann battery driven magnetized collisionless shocks at OMEGA	Grad student
2	Joshi, LLE	Observation of laser ablation of Si as a function of pulse length at constant fluence via time-resolved X-ray spectroscopy	Scientist
3	Kelso, UM	Photoionization Front Laboratory Experiments at the OMEGA Laser Facility	Grad student
4	Klein, UM	High-energy-density Targets Fabricated by The University of Michigan	Sr. Engineer
5	Kunimune, MIT	3D morphology of the hot spot and shell of warm ICF implosions at OMEGA	Grad student
6	Latham, UM	Relativistic Laser Perturbation to Laser-Driven Magnetic Reconnection*	Grad student
7	Lawrence, MIT	Characterization of Coronal Self-Generated E and B Fields in Direct Drive Implosions at OMEGA	Grad student
8	LeFevre, UM	Radiative shocks in strongly coupled plasmas on Omega-60	Postdoc
9	Lei, HU	Depositing Lithium Films to Simulate ICF Reaction Products	Undergrad student
10	Leung, UD	Designing laboratory experiments for studies of strongly collimated magnetized plasma jets	Grad student
11	Lezhnin, PPPL	Benchmarking and first results of particle-in-cell simulations with laser energy deposition module	Postdoc
12	Malko, PPPL	Detailed benchmarking of Nersnt effect in magnetized HED	Postdoc
13	Martin, HU	An Experiment Simulating the Production, Capture, and Detection of 8Li from an ICF Implosion	Undergrad student
14	McMullan, UR	Expanding the Tabulated Equation of State Implementations in the FLASH Code for the SESAME Database	Grad student
15	Michta, UR	Modeling the CESZAR Gas-Puff Z Pinch in the Radiation-Magnetohydrodynamic FLASH Code	Postdoc
16	Moczulski, UR	FLASH Simulations for the Redesign of the OMEGA TDYNO Experimental Platform	Grad student
17	Mohamed, LANL	Investigations of shape and instability control in double shell inertial fusion experiments	Postdoc
18	Mohapatra, UR	Unit testing the extended MHD capabilities in the FLASH code	Grad student
19	Murray, GA	Fabrication of OMEGA-Size Capsules with Buried Metal Layers	Engineer
20	Pagano, UTA	High Resolution Radiography with Laser Plasma Acceleration based X-ray sources	Grad student
21	Pearcy, MIT	Development of Compact Magnetic Spectrometer for use at OMEGA and the National Ignition Facility	Grad student
22	Upal, LLE	An improved direct-drive laser configuration for x-ray backlighting on the National Ignition Facility developed for a dynamic-shell foam-ball target	High-school student
23	Villani, LLE	Energy Prediction on the OMEGA EP Laser System using Machine Learning	High-school student
24	Prusten, ODL	Modeling and Simulation of Stray Light and Laser-Material Interactions of PetaWatt High Energy Lasers	CTO, industry
25	Reyes, UR	Interface Reconstruction using Gaussian Processes for Volume of Fluid Methods	Scientist
26	Rehder, UCSD	The Talbot Numerical Tool for advanced phase-retrieval from x-ray interferometry and beyond	Undergrad student
27	Reichelt, MIT	Studying capsule-hot spot mix in ICF experiments through kinetic separated reactant experiments at OMEGA	Grad student

Thursday, 27 April 2023

10:00 – 12:00 Poster Session 3

#	Name, Institution	Title	Category
1	Raymond, LLE	New Target Area for Ultraintense Laser-Plasma Experiments using MTW-OPAL	Scientist
2	Rigon, MIT	Investigating the dynamics and stability of astrophysically relevant jets on OMEGA	Postdoc
3	Ronningen, OSU	X-lites Network: supporting users and operators of mid-scale extreme light facilities	Scientist
4	Rowland, UNR	Silicon Photoionized Plasmas in Steady State at OMEGA EP	Grad student
5	Ruiz, GA	Oxygen Absorption in Silicon Doped CH Thin Films	Scientist
6	Samulski, LANL	Platform development for the study of the Rayleigh-Taylor instability from a single-feature perturbation with and without externally applied magnetic fields	Grad student
7	Saret, UCSD	Evolution in Copper from Intense Proton Beam Energy Deposition	Grad student
8	Selwood, LLNL	Controlling neutron source size with hemispherical pitcher targets for radiography	Postdoc
9	Smith, UD	Exploration of plasma transport coefficients for Magnetohydrodynamics	Grad student
10	Solomon Bogale, UCSD	Measurements of the effects of an external B-field on backscattered SRS reflectivity	Grad student
11	Spiers, UD	Hot spot magnetization profiles for ICF implosions and exploding pusher experiments with externally imposed B-fields at OMEGA	Grad student
12	Springstead, UM	Laboratory Generated Photoionization Fronts	Grad student
13	Sutcliffe, MIT	Studying the anomalous resistive regime of Biermann field saturation in planar foam targets at OMEGA	Postdoc
14	Tang, UM	Laser Channeling and Electron Acceleration from Direct Laser Acceleration	Grad student
15	Tian, UD	Modeling laboratory astrophysics experiments to study plasma jet collimation due to a strong applied magnetic field	Grad student
16	Tranchant, UR	New Class of Laboratory Astrophysics Experiments: Application to Radiative Accretion Processes Around Neutron Stars	Postdoc
17	Triantafyllidis, EP	Magnetized Blast Waves: Insights from Laboratory Astrophysics	Grad student
18	Perez, JHU	Novel Experiments to Measure Viscosity of Minerals at the Conditions of Planetary Interiors	Grad student
19	Valenzuela-Villaseca, PU	Measurement of proton fluence isotropy from D3He backlighter capsules	Postdoc
20	Vargas, SUNY F	Measuring the Temperature of WDM using Streaked Optical Pyrometry	Undergrad student
21	Pokornik, UCSD	Investigating Laboratory Astrophysics Experiments with Collective Thomson Scattering Analysis	Grad student
22	Wadas, UM	Vortex ring ejection from shocked interfaces on OMEGA EP	Grad student
23	White, UNR	Thermal Conductivity of Warm Dense Planetary Interiors	Professor
24	Whitfield, UM	Filament Shape Characterization on NSTX	Grad student
25	Wink, MIT	The next-generation Magnetic Recoil Spectrometer on OMEGA for diagnosing yield, areal density, and ion temperature with unprecedented accuracy and data turnaround	Grad student
26	Wong, LANL	Laser-driven, multi-probe radiography at Los Alamos National Laboratory	Scientist
27	Golovkin, PRISM	VISRAD, 3-D Target Design and Radiation Simulation Code	CTO, industry