

# Poster Sessions in the 13<sup>th</sup> Annual Omega Laser Users Group Workshop, 27 - 29 April 2022

(U.S. Eastern Daylight Time)

## Wednesday, 27 April 2022

### 13:45 – 15:45 Poster Session 1

#	Name, Institution	Title	Category
1	Bolanos, UCSD	Laboratory study of the initial stages of a quasi-parallel collisionless shock	Post Doc
2	Bott, Princeton	Insensitivity of a turbulent laser-plasma dynamo to initial conditions	Post Doc
3	Cage, Rice	Modeling of Collision of Two Strongly Magnetized Jets driven by Hollow Rings of Laser Beams	Graduate Student
4	LeFevre, UM	Experiments to study strongly coupled, radiative shocks on the Omega laser	Post Doc
5	Brown, Houghton	An Experiment to Simulate Trapping and Detection of Radioactive Isotopes Produced in ICF Implosions	Undergraduate Student
6	Hansen, UR	Simulating the Plasma Liner Experiment (PLX) with the FLASH Code	
7	Bailly-Grandvaux, UCSD	Characterizing the effect of magnetization at >10 kT in cylindrically imploded hot dense plasmas using dopant spectroscopy techniques and benchmarked simulations	
8	Bogale, UCSD	Measurements of the effects of an external B-field on backscattered SRS reflectivity	Graduate Student
9	Dannhoff, MIT	Scanner calibration and image plate analysis for diagnosing x-ray dose impact on WRF proton spectrometer response	Graduate Student
10	Evans, MIT	The CryoPXTD diagnostic for simultaneous measurement of x-ray and nuclear emission histories with 10 ps relative timing accuracy at OMEGA	Graduate Student
11	Fischer, Orolia	Precise Time Sync for High Energy Physics Applications	
12	Gindling, Geneseo	Using a Cu64 Source to test SLICS	Undergraduate Student
13	Hotchkiss, Martin, Lei, Houghton	Background Rates Outside the OMEGA-60 Target Chamber Seconds to Minutes After a High-Yield Shot	Undergraduate Student
14	Broughton, LANL	Laser driven flash X-ray radiography of shocked materials	Post Doc
15	Bruhaug, UR	High Power, High-Energy THz Generation Using Joule and Kilojoule Class Lasers	Graduate Student
16	Kessler, UR	Inclusion, Diversity, and Equity at the Laboratory for Laser Energetics	
17	Armstrong, UR	Implementation and Verification of Spitzer Viscosity in the FLASH Code	Graduate student
18	Sutcliffe, MIT	Electron Weibel instability-generated magnetic fields in laser-produced plasmas at OMEGA	Graduate student
19	Perez, JHU	Novel Experiments to Measure Viscosity of Minerals at the Conditions of Planetary Interiors	Graduate student
20	Zeraouli, CSU	Ultra-Compact X-ray Spectrometer for high repetition rate laser plasma experiments	Graduate student
21	Kabadi, MIT	Using the PTOF and WRF diagnostics to measure the D3He s-factor from ICF implosions at OMEGA and the NIF	Graduate student

## Wednesday, 27 April 2022

16:00 – 18:00 Poster Session 2

#	Name, Institution	Title	Category
1	Lu, UR	Numerical Modeling of Laser-Driven Plasma Experiments Aiming to Study Turbulent Dynamo and Thermal Conduction at the National Ignition Facility	Post Doc
2	Michta, UR	FLASH simulations of a magnetized parallel collisionless shock experiment	Post Doc
3	Sauppe, LANL	Modeling 3D Drive Asymmetries in Laser-Driven Cylindrical Implosion Experiments using FLASH	
4	Suzuki-Vidal, Imperial	A laser-driven platform to study angular momentum transport in disk-jet transitions: First results at OMEGA	Virtual
5	Reichelt, MIT	Target Design Considerations for Buried Layer Experiments at OMEGA Using xRAGE and iFP	Graduate Student
6	Frank, UD	Effects of Self-Generated B-field on the Stagnation Phase of OMEGA Implosions	Graduate Student
7	Moczulski, UR	Implementation and Verification of LC Circuit for Z-pinch FLASH Simulations	Graduate Student
8	Helburn, Geneseo	Target Fabrication for Pelletron Accelerator Experiments at SUNY Geneseo	Undergraduate Student
9	Johnson, MIT	Step-range-filter spectrometers for measurements of broad-band MeV-proton energy spectra at OMEGA and the National Ignition Facility	Graduate Student
10	Sebald, Prism	VISRAD, 3-D Target Design and Radiation Simulation Code	
11	Leimanis, Geneseo	Rapid Evaporation of Activated Material for Detector Testing	Undergraduate Student
12	Dick, UM	Computational and theoretical investigation of material viscosity in shock-driven systems	Graduate Student
13	Farmakis, UR	Expanding the Tabulated Equation of State Implementations in the FLASH Code for the SESAME Database	Graduate Student
14	Reyes, UR	Implementation of a 2D Unsplit Volume of Fluid Interface-capturing Method for Multifluid Compressible Flows in the FLASH Code	
15	Russell, UM	Magnetic field and relativistic-electron dynamics in an asymmetric laser-driven magnetic reconnection geometry	Graduate Student
16	Pearcy, MIT	Development of Compact Magnetic Spectrometer for use at OMEGA and the National Ignition Facility	Graduate Student
17	Cordova, UCSD	Laser pulse-length dependent ablation and shock generation in silicon at $10^{15}$ W cm <sup>-2</sup> intensities	Graduate student
18	Chang, MIT	Investigating CR-39 response to protons >4 MeV after bulk etching	Graduate Student
19	Angulo, UM	Experiments to study KH evolution of filaments feeding starburst galaxies on Omega-EP	Graduate Student
20	Gallardo-Diaz, UNR	Kr X-ray spectroscopy in OMEGA implosion experiments	Graduate student

## Thursday, 28 April 2022

### 10:00 – 12:00 Poster Session 3

#	Name, Institution	Title	Category
1	Tzeferacos, UR	Strong Suppression of Heat Conduction in Laser-driven Magnetized Turbulent Plasmas	
2	Wadas, UM	Observation and scaling of vortex rings ejected from shock-accelerated interfaces on Omega EP	Graduate Student
3	Zhang, Princeton	Ion and Electron Acoustic Bursts during Anti-Parallel Reconnection Driven by OMEGA Laser	Post Doc
4	Foo, Princeton	Extracting Velocity Distribution Functions from Thomson-Scattered Spectra of non-Maxwellian Plasmas	Undergraduate student
5	Peters, UD	Studies of cylindrical implosions with externally applied B-field for varying plasma beta	Undergraduate Student
6	Walsh, LLNL	Using the Gorgon extended-MHD code for studying magnetized plasmas on the OMEGA Laser Facility	Postdoc
7	Louscher, Geneseo	Oxygen Monitoring in Xylene NTOF Detectors	Undergraduate Student
8	Perez-Martin, HZDR	Investigation of collisional plasma shocks through Optical Thomson Scattering	Graduate Student
9	Phipps, GA	Precision Machining Development in Target Fabrication at General Atomics	
10	Roumell, Geneseo	Using Rutherford Backscattering Spectroscopy depth profiling to characterize targets at SUNY Geneseo	Undergraduate Student
11	Griffin, UNR	Measuring Transport Properties in Warm Dense Matter at the OMEGA Laser Facility	Graduate Student
12	Righi, UCSD	Computational design of high-pressure iron Rayleigh-Taylor strength experiments for the NIF	Graduate Student
13	Saret, UCSD	Measurements of Temperature Evolution in Copper from Intense Proton Beam Energy Deposition	Graduate Student
14	Samulski, VT	Single-feature perturbation seeded Rayleigh-Taylor instability studied in planar geometry	Graduate Student
15	Tang, UM	High Energy, Relativistic Intensity Laser Channeling and Direct Laser Acceleration of Electrons from an Underdense Plasma	Graduate Student
16	Springstead, UM	Analysis of Systematic Uncertainties in X-ray Spectroscopy Data	Graduate Student
17	Kunimune, MIT	Knock-on deuteron imaging (KODI) of direct-drive ICF implosions at OMEGA	Graduate Student
18	Axelsen, Geneseo	Target Chamber Manipulator	Undergraduate Student
19	Tubman, LLNL	Creating magnetized collisionless shocks within the laboratory	Post Doc
20	Rowland, UNR	Laboratory Silicon Photoionized Plasmas in Steady-State at OMEGA EP	Graduate Student