

54th Anomalous Absorption Conference

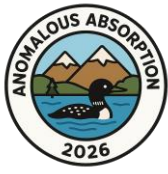
May 11-15, 2026



Whitefish, Montana

Sponsored by

**Physics of
Plasmas**



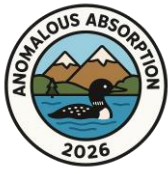
54th Anomalous Absorption Conference
Whitefish, MT
May 11-15, 2026

54th Anomalous Absorption Conference Agenda

Sunday, May 10, 2026

6:00-9:00 PM Welcome Reception and Badge Pick-Up

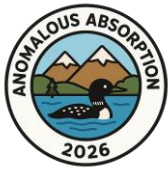
Lakeside Pavilion



54th Anomalous Absorption Conference Agenda

Monday, May 11, 2026

7:45	Grab and Go Breakfast in the Ramsey Pre-Function Area	
8:15	Introduction & Welcome	Jason Myatt, U. Alberta
	Session 1: ICF: Shocks, Foams & Implosions	Chair: Brian Haines
8:30-9:00	Invited: Slowly rotating polarization state suppresses cross beam energy transfer in homogeneous expanding fusion plasmas	Gaurav Raj, Blue Laser Fusion
9:00-9:20	3D Simulations of Density Perturbations Seeded by the Structure of Dry and Wetted Foams	Adrien Pineau, LLE
9:20-9:40	Simulations of Shocks in Wetted Foams Irradiated by Intense Lasers Using the FLASH Code and Wetted Foam Target Stability	Andrey Solodov, LLE
9:40-10:00	Generation of Hot Electrons from Two Plasmon Decay and Monte Carlo transport in a 3D ALE-AMR hydrodynamics code for direct-drive ICF	Romain Liotard, LLE
10:00-10:20	Modeling direct-drive implosions with high-Z fuel dopants with the xRAGE code	Irina Sagert, LANL
10:20-10:40	Coffee Break	
	Session II: CBET I	Chair: John Moody
10:40-11:10	Invited: On the influence of optical smoothing techniques on cross-beam energy transfer	Yann Lalaire, CEA, DAM, DIF, F-91297 Arpajon, France
11:10-11:30	Comparison of laser absorption predictions from CBET models with experimental measurements	Dana Edgell, LLE
11:30-11:50	Numerical study of the impact of laser features on propagation within a plasma in the Inertial Confinement Fusion regime	Paula Cárdenas Ayala, French Alternative Energies and Atomic Energy Commission
11:50-12:10	Mitigation study of laser plasma interactions with broadband lasers at Focused Energy	Linh Nguyen, Focused Energy
12:10-12:30	Laser polarization effects on crossed-beam energy transfer in inertial confinement fusion	Pierre Michel, LLNL
12:30-1:30	Lunch in the Stumptown & Viking Rooms	
1:30-7:00	Open	
	Evening Plenary	Chair: Wojciech Rozmus
7:00-8:00	Creating Astrophysical Conditions at High Energy Density Facilities	Carolyn Kuranz, U. Michigan
8:00-10:00	Poster Session I	

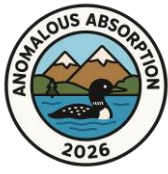


54th Anomalous Absorption Conference Agenda

Monday, May 11, 2026 – Poster Session I, Stumptown and Viking Rooms

8:00-10:00 PM

P-1	Alejandro Campos, LLNL	Comparison of HED codes for ICF capsule simulations
P-2	Debolina Chakraborty, Stanford University	Resonantly Excited Structured Plasma Waves
P-3	Albert Countryman, UCLA	Kinetic Simulations of the Role of Pulse Shape and Density Scale Length on the Development of SRS under IFE Ignition Scale Plasma Conditions
P-4	Filipe Cruz, IST	Broadband laser mitigation of laser-plasma instabilities: a comparison of PIC simulations and Generalized Photon Kinetics
P-5	Christopher Grayson, LLNL	Beam Smoothing Effects on Laser-Plasma Instabilities: OMEGA 2D SSD for ICF-Relevant Plasmas
P-6	Andrew Longman, LLNL	Speckles with a Twist: Towards angular momentum smoothing in laser-plasma interactions
P-7	Bertrand Martinez, CEA DAM	Experimental characterization of metallic x-ray sources at the Omega laser facility
P-8	Jonathan Peebles, LLE	Utilizing the Electromagnetic Pulse from a High-Intensity Laser to Mitigate Laser Imprint
P-9	Benjamin Reichelt, LANL	Quantifying Low and Mid-Z Mix of an OMEGA Experiment Utilizing Nuclear and X-Ray Diagnostics
P-10	Wojciech Rozmus, University of Alberta	Laser-Plasma Coupling of Randomized Beams in Transverse Flow: Drag, Ion Heating, and Shock Formation
P-11	Camille Samulski, LANL	Exploring Capsule Design Space for Polar Direct Drive Inertial Fusion Energy Platforms
P-12	Atsushi Sunahara, Blue Laser Fusion	Irradiation Uniformity in a Direct-Drive Fusion Reactor Enabled by CBC-OEC Lasers



54th Anomalous Absorption Conference Agenda

Tuesday, May 12, 2026

7:45 Grab and Go Breakfast in the Ramsey Pre-Function Area

Session III: Laser Plasma Interactions

Chair: Pierre Michel

8:30-9:00 Invited: Absolute stimulated Raman scattering at densities below quarter critical

Russell Follett, LLE

9:00-9:20 Ray-tracing for diagnostic comparison at the Laser Mégajoule Facility

Cael Warner, U. Alberta

9:20-9:40 Experiment Design for Hot Electron Mitigation on the FLUX Platform

Janukan Sivajeyan, U. Alberta

9:40-10:00 Hello, World! pyF3D

Mikhail Belyaev, LLNL

10:00-10:20 Spectral phase optimization of broad band lasers enhances absolute instability thresholds beyond the coherence time limit

Archis Joglekar, Ergodic

10:20-10:40 Coffee Break

Session IV: ICF (Hohlraums, Rad Drive)

Chair: Nicholas Ruof

10:40-11:10 Invited: Contributions of Au Bubble Behavior to Hohlraum Bang Time Discrepancy

Brian Haines, LANL

11:10-11:30 When Marshak Waves Pass By: The Interface Temperature

Mordecai Rosen, LLNL

11:30-11:50 Initial results of the XFOL platform: studying radiation flow in a stochastic medium

Pawel Kozlowski, LANL

11:50-12:10 THOR: Developing a Next-Generation Platform for Radflow and Opacity Measurements

Ryan Lester, LANL

12:10-12:30 Maximization of Laser Coupling with Cryogenic Targets

Matthias Geissel, SNL

12:30-1:30 Lunch in the Stumptown & Viking Rooms

1:30-7:00 Open

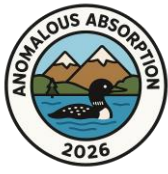
Evening Plenary

Chair: Jason Myatt

7:00-8:00 Strategy to Achieve Robust Burn at the National Ignition Facility

Laurent Divol, LLNL

8:00-10:00 **Poster Session II**

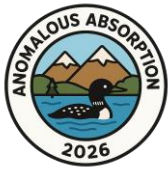


54th Anomalous Absorption Conference Agenda

Tuesday, May 12, 2026 – Poster Session II, Stumptown and Viking Rooms

8:00-10:00 PM

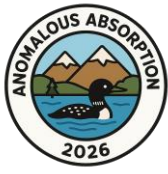
P-1	Skylar Dannhoff, MIT	Suppression of hohlraum wall expansion by pre-imposed axial magnetic fields on OMEGA
P-2	Blagoje Djordjevic, LLNL	How Symmetry Considerations Scale up to NextGen Drive Energies
P-3	Irem Nesli Erez, University of Colorado	Experimental Test of Magnetized LPI Theory Using Optical Thomson Scattering and Cross-Polarized CBET
P-4	Matthew Gjevre, University of Alberta	XUV Diagnostic System for Measuring the Focusing of Protons Produced by High Intensity Laser Pulses
P-5	Griffin Glenn, Sandia National Laboratories	Development of multi-frame 6 keV x-ray backlighting for the Z Machine using hybrid CMOS detectors
P-6	Elaine Koh, Stanford University/SLAC	Diffraction and Dispersion from Blazed Plasma Reflection Gratings
P-7	Ian Min-Roberts, University of Alberta	Laser Filamentation Seeded by Speckles and Particle Noise
P-8	Harsha Rajesh, Stanford University	Gas Power Meter and Beam Dump for High-Energy Lasers
P-9	Jill Schell, University of Michigan	Michigan Target Research and Fabrication (MiTRF)
P-10	Eleanor Tubman, University of California, Berkeley	Plasma expansion into background He-gas fills
P-11	Gina Vasey, LANL	Multigroup Radiation Diffusion with HOLO for Modeling PDD-EP
P-12	Erik Vold, LANL	Laser Driven Hydrodynamic Instabilities, Plasma Diffusion and Atomic Mixing in Inertial Confinement Fusion (ICF) Reactions



54th Anomalous Absorption Conference Agenda

Wednesday, May 13, 2026

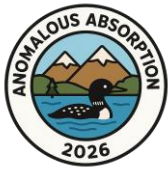
7:45	Grab and Go Breakfast in the Ramsey Pre-Function Area	
	Session V: ICF (Burn, Ignition NIF, Basic ICF, IFE)	Chair: Andrey Solodov
8:30-9:00	Invited: Towards Measuring Hotspot Temperature as a Proxy for Ignition Robustness	Benjamin Bachmann, LLNL
9:00-9:20	Important concepts commonly confused in fusion analysis	Baolian Cheng, LANL
9:20-9:40	Large-scale high-yield implosions for inertial fusion energy (IFE): enhanced performance and distinct physics characteristics	Darwin Ho, LLNL
9:40-10:00	Modeling Capsule Implosions in Indirect Drive THOR Experiments	Kevin Ma, LANL
10:00-10:20	Residual kinetic energy reduction in NIF inertial confinement fusion implosions	Nicholas Ruof, LLNL
10:20-10:40	Coffee Break	
	Session VI: CBET II	Chair: Yann Lalaire
10:40-11:10	Invited: New cross-beam energy transfer measurement platform at the National Ignition Facility	Nuno Lemos, LLNL
11:10-11:30	Validating cross-beam energy transfer models using indirect-drive ICF experiments at NIF	William Riedel, LLNL
11:30-11:50	Accuracy of the Ray-Tracing Modeling of Cross Beam Energy Transfer in Inertial Confinement Fusion Hohlräume	Albertine Oudin, LLNL
11:50-12:10	Cross-Beam Energy Transfer with Spectral Smoothing: influence of resonant frequency pairs on the energy transfer	Godefroy Meynard, French Alternative Energies and Atomic Energy Commission
12:10-1:30	Lunch in the Stumptown & Viking Rooms	
1:30-2:30	Business Meeting in the Ramsey Room	
2:30-6:30	Open	
6:30-7:00	Reception, Lakeside Pavilion	
7:00-8:30	Banquet in the Lakeside Pavilion	
8:30-10:00	Fireside S'mores	



54th Anomalous Absorption Conference Agenda

Thursday, May 14, 2026

7:45	Grab and Go Breakfast in the Ramsey Pre-Function Area	
	Session VII: Short Pulses, Compression	Chair: Antonino Di Piazza
8:30-9:00	Invited: Electron Dynamics in Realistic Short-Pulse, High-Intensity Laser Focal Fields	Caleb Guthrie, U. Alberta
9:00-9:20	Ionization-Seeded Current Filamentation in Collisionless Plasma Sheaths	Audrey Farrell, UCLA
9:20-9:40	Ultra-High-Intensity Regimes of Laser Self-Focusing	Caleb Redshaw, Stanford
9:40-10:00	High-Power Characterization of Ionization Diffraction Gratings	Victor Perez-Ramirez, Stanford University
10:00-10:20	Autoresonant Creation and Control of Plasma Structures	Jonathan Wurtele, UC Berkeley
10:20-10:40	Coffee Break	
	Session VIII: Optical Diagnostics: Thomson Scattering, CBET	Chair: Jason Myatt
10:40-11:10	Invited: Characterizing Plasma Conditions in ICF Hohlräume using 3 Optical Thomson Scattering	Steven Ross, LLNL
11:10-11:30	Measurements of plasma conditions with a high bandwidth ultraviolet laser using cross-beam energy transfer	Avi Milder, LLE
11:30-11:50	Geometric Optics Model of Thomson Scattering Enhanced by Parametric Coupling	Daniel Carleton, U, Alberta
11:50-12:10	Thomson Scattering with Gain	David Turnbull, LLE
12:10-12:30	Enhanced Ion-acoustic Wave Fluctuations Driven by Speckled Heater Beams	Kyle McMillen, LLE
12:30-1:30	Lunch in the Stumptown & Viking Rooms	
1:30-7:00	Open	
	Evening Plenary	Chair: Robert Fedosejevs
7:00-8:00	Light-matter interaction in the strong-field QED regime	Antonino Di Piazza, LLE
8:00-10:00	Poster Session III	

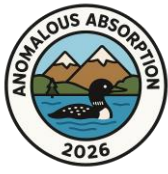


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Thursday, May 14, 2026 – Poster Session III, Stumptown and Viking Rooms

8:00-10:00 PM

P-1	Sida Cao, Stanford University/SLAC	A Flying Focus with Arbitrary Directionality
P-2	Daniel Carleton, University of Alberta	Application of ray-tracing Thomson scattering theory to experimental data
P-3	Sarah Hansen, LANL	Validation of Scaling Capabilities of LANL's xRage for Polar Direct Drive Implosions
P-4	Shaun Kerr, LLNL	First demonstration of a cone & wire backlighter for robust, high energy, small source size x-ray radiography using NIF-ARC
P-5	Sallee Klein, University of Michigan	High-energy-density Targets Fabricated by The University of Michigan
P-6	Jason Myatt, University of Alberta	Memories of Reuben Epstein
P-7	Vijay Patel, UCLA	Generalized multi-dimensional conservation laws for stimulated Raman and Brillouin scattering in a density gradient
P-8	Yuan Shi, University of Colorado	Particle-in-cell simulations of laser crossbeam energy transfer via magnetized ion-acoustic wave
P-9	William Taitano, LANL	Conditional Formulation for the Vlasov-Ampere Equations: A Novel Multiscale Structure Preserving Kinetic Plasma Formulation to Bridge Continuum and Kinetic Scales
P-10	Phil Travis, Ergodic	Optimizing designs and including multiscale physics in an implosion code via differentiable simulation
P-11	Frank Tsung, UCLA	Investigation of LPI near the quarter critical surface under the influence of temporal bandwidth



54th Anomalous Absorption Conference Agenda

Friday, May 15, 2026

7:45 Grab and Go Breakfast in the Ramsey Pre-Function Area

Session IX: High Energy Density

Chair: Griffin Glenn

8:30-9:00 Invited: Gas Optics for Tunable Beam Splitting, Harmonic Separation, and Spectral and Coherent Beam Combining
Ke Ou, Stanford University

9:00-9:20 Comparison of Kinetic theory and PIC modeling of magnetized Laser-plasma interactions
John Moody, LLNL

9:20-9:40 Mean Force Kinetic Theory of Warm Dense Matter
Lucas Babati, U. Michigan

9:40-10:00 Improvements in non-LTE atomic kinetics modeling for ICF hohlraums
Mehul Patel, LLNL

10:00-10:20 Coffee Break

Session X: ICF (R-T Instability, Radiation, Nuclear Diagnostics)

Chair: Benjamin Bachmann

10:20-10:50 Invited: Evidence of THOR Window Gap Closure in Experiment and Simulation
Damyn Chipman, LANL

10:50-11:10 Severity of the Deceleration Rayleigh-Taylor Instability in Inertial Confinement Fusion Targets
Jan Velechovsky, LANL

11:10-11:30 Hotspot mix diagnostics in Inertial Confinement Fusion experiments with the Nuclear Imaging System
Mora Durocher, LANL

11:30-11:50 Investigation of the D-T γ -to-neutron and D-3 He γ -to-proton branching ratios at ICF facilities
Justin Jeet, LLNL

11:50-12:00 Conference Adjourns – See you next year!

12:00 Grab and Go Lunch in the Stumptown & Viking Rooms