

ZFSW 2026 Breakout Session

Theory and Computation / Data Science and Machine Learning

Wednesday (Aug. 12th)

(15:30—16:00) **Joshua Leveillee**, *LANL*: Multiphase EOS ensembles - leveraging limited uncertainty quantification with phase boundary data and expert input

(16:00—16:30) **Meghan Lentz**, *SNL*: Rapid Materials Discovery for Improved MagLIF Liners

(16:30—17:00) **Christopher Jawetz**, *SNL*: A Mesoscale Framework for Titanium Microstructure Evolution Across Heat Treatments and Additive Manufacturing Processes

(17:00—17:30) **Ember Salas and Vayle Vera Cruz**, *SNL*: The quest for high pressure “Goldilocks” atomistic material models

Thursday (Aug. 13th)

(13:30—14:00) **Marc Schaeuble**, *SNL*: Using Machine Learning to Efficiently and Accurately Predict Detailed NLTE Spectra

(14:00—14:30) **Svetoslav Nikolav**, *SNL*: Extreme State Thermodynamics of Nickel and Stainless Steel

(14:30—15:00) **Maggie Berrens**, *LLNL*: Machine-Learned Ab Initio DFT Calculations of Warm Dense Equation of State and Ionic Transport Coefficients of D2O

(15:00—15:30) **Pauline Richard**, *SNL*: Ion transport models for warm dense Beryllium using Machine-learned interatomic potentials

(15:30—16:00) **Dillon Yost**, *Pacific Fusion*: Kubo-Greenwood and TDDFT electrical conductivity calculations: pathologies and physics-informed remedies

(16:00—16:30) **Brian O'Shea**, *MSU*: Extending numerical modeling of plasma turbulence with high-order methods and machine learning

Friday (Aug. 14th)

(10:00—10:30) **Nicki Bennett**, *SNL*: Power flow in pulsed-power systems

(10:30—11:00) **Jeff Woolstrum**, *SNL*: Exploring MRT Across Density Jumps Using FLEXO

(11:00—11:30) **William Lewis**, *SNL*: An introduction to using Next Generation Workflows to optimize MagLIF target design: Part I

(11:30—12:00) **Rebekah White**, *SNL*: An introduction to using Next Generation Workflows to optimize MagLIF target design: Part II

Time (MST)	Wednesday (Aug. 12)	Thursday (Aug. 13)	Friday (Aug. 14)
08:30 (8:30 AM)			
09:00 (9:00 AM)			
09:30 (9:30 AM)			
10:00 (9:30 AM)	Break	Break	Nicki Bennett
10:30 (9:30 AM)			Jeff Woolstrum
11:00 (9:30 AM)			William Lewis
11:30 (11:30 AM)			Rebekah White
12:00 (12:00 PM)	Lunch	Lunch	Lunch
12:30 (12:30 PM)			
13:00 (1:00 PM)			End
13:30 (1:30 PM)		Marc Schaeuble	
14:00 (2:00 PM)		Svetoslav Nikolav	
14:30 (2:30 PM)		Maggie Berrens	
15:00 (3:00 PM)	Break	Pauline Richard	
15:30 (3:30 PM)	Joshua Leveillee	Dillon Yost	
16:00 (4:00 PM)	Meghan Lentz	Brian O'Shea	
16:30 (4:30 PM)	Christopher Jawetz	Poster Session	
17:00 (5:00 PM)	Ember Salas <i>and</i> Vayle Vera Cruz		
17:30 (5:30 PM)	End		
18:00 (6:00 PM)			
18:30 (6:30 PM)		End	