

Mountain Standard Time	GSCCM Early Career Symposium August 3, 2021
9:00 AM	Log on, setup, speaker ready room...
9:45 AM	Introductory Remarks
	Presentation of Early Career Award, by Cindy Bolme
10:00 AM	Early Career Award Plenary Presentation Travis J. Volz - <i>Lawrence Livermore National Laboratories</i> Elastic moduli of shock-formed cubic diamond and hexagonal diamond
10:30 AM	Patrick Heighway - <i>University of Oxford</i> Kinematics of slip-induced rotation during uniaxial compression
10:45 AM	Silvia Pandolfi - <i>SLAC</i> Ultra-fast visualization of deformation mechanism for dynamically-compressed silicon
11:00 AM	Kien Nguyen-Cong - <i>University of South Florida</i> Carbon at extreme conditions
11:15 AM	Gaurav Kumar - <i>University of Maryland College Park</i> Pathways for Vibrational Energy Up-pumping in Crystalline RDX
11:30 AM	Reid Ginoza - <i>Applied Research Associates, and University of West Florida</i> A spline Hugoniot model for LX-17 that ensures valid speed of sound
11:45 AM	Lightning Talk Zhiyu Liu - <i>University of Maryland, College Park</i> Computational Study of Phonon Properties in Crystalline Cellulose I β
12:00 PM	1 hr Lunch Break
1:00 PM	Allen Garcia - <i>University of Maryland</i> Quantitative Properties Through Semantic Learning
1:15 PM	Andrew Boddorff - <i>Georgia Institute of Technology</i> Role of heterogeneous interfaces in the spall response of additively manufactured GRCop-84 and Inconel 625 bimetallics3
1:30 PM	Michael Powell - <i>Los Alamos National Laboratory</i> Understanding the anisotropic thermal conductivity of high explosives through impulsively stimulated thermal scattering
1:45 PM	Dylan Walters - <i>University of Iowa</i> Learning rate-dependent plasticity models from atomistic simulations using Deep Neural Networks for improved meso-scale modeling of shock-induced void collapse of HMX
2:00 PM	Sangeeth Balakrishnan - <i>University of Maryland, College Park</i> Ameliorating synthesis and scarce data challenges through joint embedding for high energy molecule generation
2:15 PM	SUNGWOO JANG - <i>Georgia Institute of Technology</i> Monitoring shock compression response of heterogeneous materials using an optical microcavity sensor
2:30 PM	Bryce Thurston - <i>Sandia National Laboratories</i> Simulations of Shock-Induced Phase Transitions in CdS Nanoparticles
2:45 PM	Jesse Carter Hearn - <i>Center for Engineering Concepts Development at University of Maryland</i> Machine Learning of Energetic Binders
3:00 PM	End Day 1

Mountain Standard Time	GSCCM Early Career Symposium August 4, 2021
9:00 AM	Log on, setup, speaker ready room...
9:45 AM	Introductory Remarks
10:00 AM	Pinkesh Malhotra - <i>Johns Hopkins University</i> Dynamic Shearing Resistance of an Energetic Material Simulant: Sucrose
10:15 AM	Ashley Williams - <i>University of South Florida</i> Alkali pentazolates as high-nitrogen energetic materials
10:30 AM	Shobhan Roy - <i>University of Iowa</i> A study of shock initiation mechanisms and propagation of reaction in PBXs through interface-resolved reactive simulations
10:45 AM	Prarthana Parepalli - <i>University of Iowa</i> Effect of reaction models on meso-informed ignition and growth (MES-IG) predictions
11:00 AM	Felipe Gonzalez - <i>University of California, Berkeley</i> Shock Hugoniot curves and electronic properties of warm dense magnesium liquids from ab initio simulations
11:15 AM	Belinda Pacheco Johnson - <i>University of Illinois</i> Tracking Hot Spot Behavior in a Model Plastic-Bonded Explosive
11:30 AM	Brenden Hamilton - <i>Purdue University</i> Path-Dependent Mechanochemistry in Shock-Induced Hotspot Chemistry
11:45 AM	Lightning Talk Keara Frawley - <i>Georgia Institute of Technology</i> Orientation Dependence on Spall Strength of High Density Polyethylene (HDPE)
11:50 AM	Lightning Talk Connor O'Ryan - <i>University of Maryland</i> Automatic Knowledge Graph Generation from Text for Synthesis of Energetic Material
12:00 PM	1 hr Lunch Break
1:00 PM	Keith Jones - <i>Sandia National Laboratories</i> Reactive Molecular Dynamics Simulations of Shock-Induced Chemistry in Phenolic Polymer
1:15 PM	Elliot Wainwright - <i>US Army Research Laboratory</i> Characterizing microsecond energy release of metal-based reactive materials using laser-induced shock waves
1:30 PM	Jonathan Willman - <i>University of South Florida</i> Inelastic Response of Diamond to Shock Compressions
1:45 PM	Deyan Mihaylov - <i>Laboratory for Laser Energetics</i> Improved first-principles equation-of-state table of deuterium for high-energy-density science applications
2:00 PM	Panel discussion and open Q&A Panel TBA
3:00 PM	End Day 2