Start	End	Day 1 - Monday, August 13, 2018	
8:30am	9:15am	Registration and Breakfast	
9:15am	9:30am	Welcome	
9:30am	10:30am	Session 1A: Experiments (Room A); Chair: John Farnsworth, CU	Session 1B: Engines (Room B); Chair: Bret Windom, CSU
9:30am	9:45am	1A.1 Connor: *Experimental Quantification of Airborne Odor Plumes for the Development of Search Algorithms*	1B.1 Bernardi Bestel: *Natural Gas and CFR Engine Modeling for Knock Prediction*
9:45am	10:00am	1A.2 Dunbar: *Design and Testing of a Multi-Hole Probe Geometry Insensitive to Manufacturing Variance*	1B.2 Stoker: *CFD Model for an Automobile Refueling System*
10:00am	10:15am	1A.3 Sinner: *Performance of an Unsteady, Low-Speed Wind Tunnel with an Upstream Louver System for Longitudinal Velocity Modulation*	1B.3 Alsulami: *Investigation on the Role of Fuel Droplet Vaporization and Atomization on Spray Flame Stability and Dynamics*
10:15am	10:30am	1A.4 Droste: *Continuous Pseudorandom Longitudinal Velocity Perturbations in an Unsteady Low-Speed Wind Tunnel*	1B.4 Brown: *Computational Modeling of Propane Direct Injection for Advanced Compression Ignition Engines*
10:30am	11:00am	Morning Break	
11:00am	12:00pm	Keynote: "A Tale of Two Quasi-Linear Dynamical Systems: Modulated Waves and Shear-Driven Instabilities", Prof. Greg Chini, University of New Hampshire	
12:00pm	1:30pm	Lunch	
1:30pm	2:30pm	Session 2A: CFD Methods (Room A); Chair: John Evans, CU	Session 2B: Porous Media (Room B); Chair: Peter Hamlington, CU
1:30pm	1:45pm	2A.1 Peters: *A Divergence-Conforming Hybridized Discontinuous Galerkin Method for the Incompressible Reynolds Averaged Navier-Stokes Equations*	2B.1 Lou: *Numerical/Experimental Study of a Direct Contact Membrane Distillation System*
1:45pm	2:00pm	2A.2 Yahia: *Central Moment Lattice Boltzmann Method for Computation of Flows on Stretched Lattice Grids*	2B.2 Johnston: *Application of Novel Immersed Boundary Method Techniques to Simulation of Flow Over a Cylinder in a Channel*
2:00pm	2:15pm	2A.3 Saad: *Non-Newtonian Fluid Flow Simulations using Cascaded Lattice Boltzmann Method*	2B.3 Pocher: *Flow Regimes through Periodic Arrays of Cylinders (Part 1)*
2:15pm	2:30pm	2A.4 Wieland: *Mastering the Modality of the Rayleigh-Taylor Instability through Wavelet Based Adaptive Mesh Refinement*	2B.4 Khalifa: *Flow Regimes Through Periodic Arrays of Cylinders (Part 2)*
2:30pm	3:00pm	Afternoon Break	
3:00pm	4:00pm	Session 3A: Fire (Room A); Chair: Tony Saad, Utah	Session 3B: Geoastrophysics (Room B); Chair: Nils Tilton, CSM
3:00pm	3:15pm	3A.1 Makowiecki: *Dual Frequency Comb Spectroscopy for the Investigation of Ignition Behaviour of Wildland Fire Fuels*	3B.1 Robey: *An Assessment of a Mass Flux Closure for the Ocean Surface Boundary Layer*
3:15pm	3:30pm	3A.2 Glusman: *A Chemical Kinetic Mechanism Reduction for Wildland Fire Direct Numerical Simulation and Experimental Validation*	3B.2 Al Refae: *The Effects of a Horizontal Magnetic Field on Rayleigh-Bénard Convection*
3:30pm	3:45pm	3A.3 Lapointe: *Fire Simulation Using Adaptive Mesh Refinement*	3B.3 Yan: *Thermal Convection with a Strong Vertical Magnetic Field*
3:45pm	4:00pm	3A.4 Wimer: *Direct Numerical Simulations of Plumes and Pool Fires Using Adaptive Mesh Refinement*	3B.4 Binswanger: *Experimental Investigation of Oblique Dispersive Shock Waves in Supercritical Shallow Water Flow*
5:00pm	7:00pm	Dinner at The Sink	

Start	End	Day 2 - Tuesday, August 14, 2018	
8:30am	9:00am	Breakfast	
9:00am	10:15am	Session 4A: Machine Learning (Room A); Chair: Ryan King, NREL	Session 4B: Biology (Room B); Chair: Brad Smith, UC Denver
9:00am	9:15am	4A.1 Ying: *Scale-Dependent Localization for Ensemble Filtering of Quasi-Geostrophic Flows*	4B.1 Sharifi: *Impedance vs Peristaltic Pumping in Zebrafish 24-30 hpf Embryonic Heart*
9:15am	9:30am	4A.2 Karam: *Applying Machine Learning to the Sedov-von Neumann-Taylor Blast Wave*	4B.2 Zebhi: *Computational Fluid Dynamic Simulation of Fetal Heart*
9:30am	9:45am	4A.3 Doronina: *On Markov Chain Monte Carlo Approximate Bayesian Computation Approach for Subgrid-Scale Model Development*	4B.3 Wallbank: *Two-phase Flow Effects on Human Coagulation Factor X Activation In Vitro*
9:45am	10:00am	4A.4 Isaacs: *Development of a Computational Modeling and Optimization Tool for Thin Flat Heat Pipes for Small Satellite Heat Dissipation*	4B.4 Pertile: *Parameters Governing Pressure Homogeneity in a 3D Printed Human Airway During Low Frequency Jet Ventilation*
10:00am	10:15am	4A.5 Meehan: *Characterization of Flapping in a Plane Turbulent Buoyant Jet Using Proper Orthogonal Decomposition*	4B.5 Human: *Wall-Bounded Vorticity in the Right Heart from 4DMRI Measurements*
10:15am	10:45am	Morning Break	
10:45am	12:00	Panel Discussion: Fluid Dynamics Careers in Academia, Industry, and National Laboratories	
12:00pm	1:30pm	Lunch	
1:30pm	2:15pm	Session 5A: Turbulence (Room A); Chair: Michael Calkins, CU	Session 5B: Exotic Fluid Flows (Room B); Chair: Karin Leiderman, CSM
1:30pm	1:45pm	5A.1 Whitman: *Scaling and Collapse of Conditional Velocity Structure Functions in Turbulent Premixed Flames*	5B.1 Darragh: *Supersonic Turbulence Modulation in a Particle-Laden Jet*
1:45pm	2:00pm	5A.2 Krouss: *The Influence of the Prandtl number on the Inverse Cascade in Rapidly Rotating Convection*	5B.2 Disharoon: *Characterization and Control of Gap Width Between Self-Propelling Superparamagnetic Colloids and Glass*
2:00pm	2:15pm	5A.3 Strong: *Designing a Noninvasive Laser-Based Vorticity Sensor*	5B.3 Towery: *Spontaneous Detonation Initiation in Compressible Isotropic Turbulence*
2:15pm	2:45pm	Afternoon Break	
2:45pm	4:00pm	Session 6A: CFD Modeling (Room A); Chair: Ken Jansen, CU	Session 6B: Bubbles and Droplets (Room B); Chair: Michael Calvisi, UCCS
2:45pm	3:00pm	6A.1 Kaminski: *Gravo-Aeroelastic Additively Manufactured Design of a 1% Scale Wind Turbine Blade*	6B.1 Gissinger: *Drop Squeezing through Interparticle Constrictions with Insoluble Surfactant*
3:00pm	3:15pm	6A.2 Rasmussen: *Comparison of Multiple Equations of State in Numerical Simulation of Supercritical Carbon Dioxide Flow Around a Heated Cylinder*	6B.2 Collado: *Fast Agglomeration with Permeable Drops*
3:15pm	3:30pm	6A.3 Balin: *Preliminary Steps to Scale-Resolving Simulations of Turbulent Boundary Layers with Flow Separation*	6B.3 Maristany: *Behavior of Droplets Through a Porous Membrane*
3:30pm	3:45pm	6A.4 Skinner: *Modeling of Active Flow Control in an Aggressive Diffuser with Comparison to Experiment*	6B.4 Alnajar: *A Spherical Model for an Encapsulated Microbubble Using Transient Network Theory*
3:45pm	4:00pm	6A.5 Mohan: *A Predictive Near-Wall Model for Large Eddy Simulations*	6B.5 Arifi: *A Model for the Nonspherical Oscillation of Encapsulated Microbubbles Using Transient Network Theory*