Schedule

Monday, February 10, 2020:

Session & Chair	Time	Presentation
	8:00-8:30	Registration and Breakfast.
	8:30-9:00	NSF Program Managers and Organizers Welcome.
Session I. Chair: Professor Hessam Babaee, University of Pittsburgh	**9:00-9:40**	Professor Steven Brunton, University of Washington: Introduction to data driven modeling and machine learning
	9:40-10:20	Professor George Karniadakis, Brown University: Physics-informed neural networks (PINNs) in fluid mechanics and heat transfer
	10:20-10:40	Coffee Break.
Session II. Chair: Professor Tony Rosato, New Jersey Institute of Technology	**10:40-11:20**	Professor Michael Mahoney, University of California, Berkeley: Machine learning and science?
	11:20-12:00	Professor Sharath Girimaji, Texas A&M University: Machine learning for turbulence modeling: A perspective
	12:00-13:30	Lunch.
Session III Chair: Dr. Ramakanth Munipalli, AFRL/RQRC	**13:30-14:10**	Professor Karen Willcox, University of Texas at Austin: Challenges and progress in learning physics-based reduced models for combustion processes
	14:10-14:50	Professor Linau Ren, Tsinghua University: Machine learning in turbulent reactive flow simulations
	14:50-15:30	Coffee Break.
Moderator: Professor Dimitrios Papavassiliou, University of Oklahoma	**15:30-17:00**	Panel Discussion.
	17:00-18:30	Poster Session.

Schedule

Tuesday, February 11, 2020:

Session & Chair	Time	Presentation
	8:00-8:45	Registration and Breakfast.
	8:45-9:00	Introduction and Overview.
Session IV. Chair: Dr. Cosmin Safta, Sandia National Laboratories	**9:00-9:40**	Professor Michael Brenner, Harvard University: Machine learning for PDE's
	9:40-10:20	Dr. Kevin Carlberg, University of Washington: Nonlinear model reduction: Using machine learning to enable rapid simulation of extreme-scale physics models
	10:20-10:40	Coffee Break
Session V. Chair: Professor Alan McGaughey, Carnegie Mellon University	**10:40-11:20**	Dr. Mujeeb Malik, NASA Langley Research Center: CFD vision 2030 and potential for machine learning
	11:20-12:00	Professor Justin Sirignano, University of Illinois at Urbana-Champaign: Deep learning closure models for large-eddy simulation
	12:00-13:30	Lunch
Session VI. Chair: Professor Sangyeop Lee, University of Pittsburgh	**13:30-14:10**	Professor Gianluca Iaccarino, Stanford University: (Machine) Learning to differentiate
	14:10-14:50	Professor Weinan E, Princeton University: Machine learning for fluid dynmics
	14:50-15:30	Coffee Break.
Moderator: Professor D. Scott Stewart, University of Illinois at Urbana-Champaign	**15:30-17:00**	Panel Discussion.
	17:00	Adjourn.