HPCday
May 25, 2017

Scientists from across Massachusetts will join together to celebrate and showcase the power of high performance computing across the sciences.

- *Computational Plasma Physics in the Solar System and Beyond* by Ofer Cohen (UMass Lowell)
- *Fast computational method for wave scattering* by Min Hyung Cho (UMass Lowell)
- *Polygonal Brain, Conformal Transplant, and Alzheimer's Disease* by Alfa Heryudono (UMass Dartmouth)
- *Jump Process Approximation of Particle-Based Stochastic Reaction-Diffusion Models* by Samuel Isaacson (BU)
- *Uncertainty Quantification for Electronic-Structure-Based Chemical Kinetics Modeling* by Markos Katsoulakis (UMass Amherst)
- ***Keynote:*** *Predictions of future Gravitational Wave Observations using Simulations of the Universe* by Luke Kelley (Harvard)
- *Quantitative Engineering Sustainability: Integration of Mechanics-based Models in Lifecycle Footprint* by Arghavan Louhghalam (UMass Dartmouth)
- *Cosmological Simulations of Galaxy Formation* by Ryan McKinnon (MIT)
- *Musings on Exabyte Scale Principal Component Analysis* by Randy Paffenroth (WPI)
- ***Keynote:*** *Developing IEEE TCPP Parallel and Distributed Computing Curriculum and NSF Advanced Cyberinfrastructure Learning and Workforce Development Programs* by Sushil Prasad (NSF)
- *What is stopping us from getting to exascale computing and what should we do about it? by* Devesh Tiwari (Northeastern)
- *High-Performance Electromagnetic Computations: The Domain Decomposition Paradigm* by Marinos Vouvakis (UMass Amherst)
- *How HPC is transforming the study of biological machines* by Paul Whitford (Northeastern)
- *Visualizing complex bacterial populations in animal models* by Giovanni Widmer (Tufts)
- Poster session with awards from NVIDIA, Dell, SIAM & MathWorks for student posters

Please join us at Woodland Commons at UMass Dartmouth,
285 Old Westport Road, North Dartmouth, MA
On May 25, 2017 from 8:30am - 6:30pm
Free registration and more details at: cscvr.umassd.edu/HPCday
Refreshments and lunch will be served

Hosted by the Center for Scientific Computing and Visualization Research at UMass Dartmouth.