High Performance Computing in Support of NASA's Mission

Abstract:

High Performance Computing (HPC) forms a critical and core part of the science and engineering needed to meet NASA's goals and objectives. In this talk, we look at how researchers are using large scale simulations and data analysis on HPC resources across a wide range of domains including aeronautics, human space flight, Earth science, Heliophysics, planetary science, and astrophysics to accelerate NASA missions and make revolutionary advances and discoveries. We also describe the infrastructure developed by the NASA Advanced Supercomputing (NAS) Division at Ames Research Center in Silicon Valley for largescale simulations and data analytics.