APS Scientific Computation Seminar Series

Speaker: Ben Blaiszik

Computation Institute, The University of Chicago

Title: Demonstration of Globus Research Data Management Services

Date: Monday, January 18, 2016

Time: 1:00 p.m.

Location: 401/A1100

Hosts: Nicholas Schwarz and Brian Toby

Abstract:

This seminar will include a hands-on demonstration of a variety of data management services openly available to the APS community including: data cataloging, publication, and discovery. Additionally, a simple pipeline between the services described and machine learning in a python analysis will be demonstrated.

The demonstration will leverage a variety of Globus services. Globus is software-as-aservice for research data management, used at dozens of institutions and national facilities for moving, sharing, and publishing big data. Recent additions to Globus include services for robust data publication, cataloging, and discovery that allow users and institutions to:
1) enable publication of large research datasets with flexible policies; 2) grant the ability to publish data directly from local storage, institutional data stores, or from self-managed cloud storage, without third party publishers; 3) build extensible domain-specific metadata that describe the specific research attributes; 4) develop publication workflows and automate experiment workflows to meet institutional and researcher requirements; 5) deploy public and restricted collections that define control over who may access published data; and 6) access a rich discovery model that allows others to search, interrogate, and build upon published data.