Speakers: Kyle Chard  
Senior Researcher and Fellow in the Computation Institute at the  
University of Chicago and Argonne National Laboratory  

Michael Wilde  
Software Architect and Fellow in the Computation Institute at the  
University of Chicago and Argonne National Laboratory  

Title: Introducing Parsl: A Parallel Scripting Library for Python  

Date: Wednesday, December 20, 2017  

Time: 2:00 p.m.  

Location: 401/A1100  

Hosts: Nicholas Schwarz and Brian Toby  

Abstract:  
Researchers frequently rely on large-scale and domain-specific workflows to conduct their science. These workflows may integrate a variety of independent software functions and external applications. However, developing and executing such workflows can be difficult, requiring complex orchestration and management of applications and data as well as customization for specific execution environments. In this talk, we introduce Parsl (Parallel Scripting Library), a Python library for programming and executing data-oriented workflows in parallel, addresses these problems. Developers simply annotate a Python script with Parsl directives; Parsl manages the execution of the script on clusters, clouds, grids, and other resources. Parsl orchestrates required data movement and manages the execution of Python functions and external applications in parallel.