American Nuclear Society
Northern California Section

Dinner Meeting Announcement

PyNE Collection of Nuclear Engineering Computational Tools

Wednesday, October 22, 2014

Dr. Rachel Slaybaugh, University of California, Berkeley

Python for Nuclear Engineering, or PyNE (http://pyne.io/), is a collaborative, open source project consisting of a collection of computational tools pertinent to nuclear engineering analysis and simulations. PyNE primarily provides a common Python interface for code written in C++, Python, and Fortran. This allows fundamental components of PyNE to easily be combined to form powerful and complex programs. These fundamental components include canonical nuclide and reaction naming conventions, material handling, nuclear data and cross-section reading, mesh operations, and physics-code-specific input and output parsing.

This presentation will begin with a discussion about the background and philosophy behind PyNE and include a demonstration of how PyNE could be used in a project. Dr. Slaybaugh will also cover some of the current developments, with a focus of how she's using PyNE as a tool for her research in computational methods for neutral particle transport.

ANS members and non-members welcome.
To make reservations visit:
http://local.ans.org/norcal/meetings
or contact: Tim Lloyd,
ANS NORCAL Program Committee Chair
Email: lloy1tm@westinghouse.com

Dinner: 6:30 p.m.
Program: 7:30 p.m.
659 Merchant Street
San Francisco, CA 94111
(415) 781-7058