Scientific Application Development Using Eclipse and the Parallel Tools Platform

**Organizers:** Greg Watson (Los Alamos National Laboratory)
Beth Tibbitts (IBM Research)
Craig Rasmussen (Los Alamos National Laboratory)

The Eclipse Parallel Tools Platform (PTP) is an Eclipse Foundation Technology Project (http://eclipse.org/ptp) that allows parallel tools to be integrated into the Eclipse environment.

Eclipse offers many features you’d expect from a commercial quality IDE: a syntax-highlighting editor, incremental code compilation, a source-level debugger, support for source control systems such as CVS and Subversion, code refactoring, and support for multiple languages, including C, C++, and Fortran.

PTP provides a highly integrated environment designed for parallel application development. It provides a portable open-source IDE capable of supporting a wide range of parallel architectures and runtime systems; a scalable parallel debugger; support for the integration of a wide range of parallel tools; and an environment that simplifies the end-user interaction with parallel systems.

This workshop aims to introduce participants to the Eclipse platform and provide hands-on experience in developing and debugging parallel applications using Eclipse and PTP with C, Fortran, and MPI.