

# OpenMPI Oct 2017

XSEDE HPC Monthly Workshop - Oct. 3-4, 2017 - OpenMPI

Info: <https://portal.xsede.org/group/xup/course-calendar/-/training-user/class/570/session/1364>

Location: Tufts University

Address: Collaborative Learning and Innovation Complex 574 Boston Ave Medford, MA 02155

Map: <https://goo.gl/maps/qZnMefhjdJ2>

Another Map: <http://campusmaps.tufts.edu/medford/>

Collaborative Learning and Innovation Complex (CLIC) <http://now.tufts.edu/articles/space-next-generation-thinking>

Parking: Guest parking is available adjacent to CLIC however you might also consider Dowling Parking Garage, <http://publicsafety.tufts.edu/adminsvc/parking-garages/>, which is a short walk away.

Public Transportation: Take the Red Line to Davis Sq. and the Jumbo Shuttle to campus center, a short walk from CLIC. <http://publicsafety.tufts.edu/adminsvc/shuttle-services-2/>

Questions, comments, concerns: [shawn.doughty@tufts.edu](mailto:shawn.doughty@tufts.edu)

Description: This workshop is intended to give C and Fortran programmers a hands-on introduction to MPI programming. Both days are compact, to accommodate multiple time zones, but packed with useful information and lab exercises. Attendees will leave with a working knowledge of how to write scalable codes using MPI – the standard programming tool of scalable parallel computing. It will have a hands-on component using the Bridges computing platform at the Pittsburgh Supercomputing Center.

Agenda: All times given are Eastern time

## Tuesday, Oct. 3

11:00 Welcome  
11:15 Computing Environment  
12:00 Intro to Parallel Computing  
1:00 Lunch Break  
2:00 Introduction to MPI  
3:30 Introductory Exercises  
4:10 Intro Exercises Review  
4:15 Scalable Programming: Laplace code  
5:00 Adjourn/Laplace Exercises

## Wednesday, Oct. 4

All times given are Eastern  
11:00 Advanced MPI  
12:30 Lunch Break  
1:30 Laplace Review  
2:00 Outro to Parallel Computing  
2:45 Parallel Debugging and Profiling Tools  
3:00 Exercises  
4:30 Adjourn