

Introduction to OpenMP and MPI

Wednesday, August 28, 2019 1:15 PM (4h 45m)

In this tutorial, we will introduce parallel programming with MPI and OpenMP, and the differences between the two parallel programming paradigms with hands-on exercises. The hands-on session will start with some basic OpenMP directives. More focus will be put into parallel programming with MPI, where we will cover blocking/non-blocking communication and collective communication.

For more advanced-level participants, we will have exercises on topics such as groups, communicators, derived datatypes, one-sided communication and MPI 3.0 shared-memory. The course material used in this tutorial is developed by HLRS.

Prerequisites: C/C++ or Fortran programming

Presenter: MEYER-ZHAO, Zheng (ASTRON)

Session Classification: Tutorials