Advanced MPI Course Overview

Dan Holmes

dholmes@epcc.ed.ac.uk

EPCC, University of Edinburgh

Syllabus

- Evolution of MPI including new features in MPI-3

- Mesh decomposition using MPI topologies

- MPI library internals

- Hybrid programming using MPI + OpenMP

- One-sided communication using MPI RMA

- Parallel I/O using MPI-IO

Lab sessions

- Will use ARCHER wherever possible

- Dedicated reserved queues during most lab sessions
  - standard access at all other times

- Morar is always available