11.3 Instructor's Guide

11.3 Activity 1

Instructors are encouraged to obtain an allocation for their students, either on a HPC cluster at their institution, or with NCSA (Blue Waters) or XSEDE, which are open to the U.S. academic and research communities. There may be an XSEDE Campus Champion at your institution, or you can become a Campus Champion.

Public Resources:

- National Center for Supercomputing Applications (NCSA): Blue Waters
    - About: https://bluewaters.ncsa.illinois.edu/about-blue-waters
    - Hardware: https://bluewaters.ncsa.illinois.edu/hardware-summary
    - Getting Started: https://bluewaters.ncsa.illinois.edu/documentation
    - Education Allocations: https://bluewaters.ncsa.illinois.edu/education-allocations
- The eXtreme Science and Engineering Discovery Environment (XSEDE)
    - Resources: https://portal.xsede.org/allocations/resource-info
    - Create an XSEDE account: https://portal.xsede.org/#/guest
    - Startup allocations: https://portal.xsede.org/allocations/startup
    - Education allocations: https://portal.xsede.org/allocations/education
    - Current Campus Champions: Current Champions
    - Campus Champions Program: Campus Champions

Once you have an allocation, we encourage you to send detailed instructions to your students before the start of the course/semester/internship so that they may get started. Some students may decide to use PuTTY or ssh from a terminal on a PC or Mac, others may decide to install Linux on their PC to run applications directly. We recommend the latest stable version of SuSE or CentOS, since those are the platforms used by Blue Waters and XSEDE, respectively.

11.3 Activity 2

The last two modules of this unit will be using the publicly available PLUTO code to perform astrophysical hydrodynamic calculations, and the VisIt code