

# GRADUATE LEVEL COMPUTING BOOTCAMP

August 21-23, 2023

## Hosted by:

- The Advanced Research Computing Center  
[www.uwyo.edu/arcc/](http://www.uwyo.edu/arcc/)
- Digital Scholarship Center  
[www.uwyo.edu/libraries/](http://www.uwyo.edu/libraries/)



## CLUSTER COMPUTING

DR. LIUDIMILA MAINZER, ARCC DIRECTOR

- Determining the right equipment for the job
- How to access both ARCC and NWSC:
  - Use of login nodes vs. compute nodes
  - Different types of storage
- Best practices in using HPC
- Job submission, resource selection, & monitoring
- How to be a good cluster citizen
- Problem-solving using available resources or submitting tickets
- How to use a terminal, creating conda environments, & installing software
- Resource planning, utilization, & scheduling
- In-depth look at data storage problems & solutions

## CODING IN PYTHON

KATHARINE TEYKL, DIGITAL SCHOLARSHIP LIBRARIAN

- Learn about different types of code structure
- How to documentation & add comments that are useful long-term
- Creating meaningful names for variables
- What are functions and why are they useful?
- Basic plotting, in Python
- Writing code that reduces missing values (NaN)
- Data structures and best practices in Python
- In-depth functions: Applications & utilization



### TRAINING SCHEDULE

- Monday, August 21st
  - 10am-12pm - Coding Part I
  - 12-1pm - Lunch provided
  - 1-3pm - Cluster Computing Part I
- Tuesday, August 22nd:
  - 1-3pm - Coding Part II
- Wednesday, August 23rd:
  - 1-3pm - Cluster Computing Part II



### PREREQUISITES

- Complete WyoLearn class "Basic Linux for Using HPC Systems"
- Setup UWYO email & two-factor authentication with Duo
- Acquire laptop for use at bootcamp



### SIGN UP BY JUNE 15TH!

- Email your advisor or the ARCC Program Manager to sign up
- Instructions for prerequisites will be emailed to all attendees
- Online registration will be available once location & times have been confirmed

For more information or to sign up, contact:

**ERIN PAIVA, ARCC PROGRAM MANAGER, [EPAIVA@UWYO.EDU](mailto:EPAIVA@UWYO.EDU)**