

HPC Activity Group Meeting (10/24/24)

Attendance: Nikhil Krishnaswamy, Marcelo Melo, Chris Snow, Asa Ben-Hurr, Gabrielle Allen, Michael Kirby, Andrew Kirby, Bill Carpenter, Brandon Shanks, Melissa Reynolds

- Introduction: Andrew Kirby; Research Scientist in the School of Computing (UWYO)
 - o International HPC Summer School (IHPCSS)
 - o Yearly paid program that goes for a week during the summer. Highly recommended for strong students in undergraduate
 - o This year either in Spain or Portugal
- Computing Capabilities
 - o Medicine Bow (44 nodes)
 - o 2.01 pflops (FP64)
 - o 7.53 pflops (FP32)
 - o 4224 CPU cores (AMD EPYC)
 - 48x NVIDIA H100
 - o Wyoming / NCAR Alliance
 - 13% compute share
 - 318 million CPU core-hours
 - 328,000 GPU hours
 - o 3rd university partner with ARGONNE national laboratory
- **NSF MRI (AI4WY)**
 - o 3.9M
 - o NVIDIA Superchips
 - o Compute resources
 - UWYO 75%
 - CSU 15%
 - RMAC 10%
 - o 15 different departments on award

- 33+ institutions
- Project Objective
 - Build new state-of-the-art HPC system
 - System Option 1 (Grace Hopper System)
 - 48 NVIDIA GH200
 - 400 Terabytes of storage
 - 1.63 pflops
 - System Option 2 (Grace Blackwell System)
 - Grace Blackwell GPU
 - 144 NVIDIA GB200
 - 1 petabyte of storage
 - 6.48 pflops
- Looking for CSU involvement. Getting people on board to build use-case argument for local and regional support
 - Specifically, would faculty at CSU plan to use system and what would they aim to use it for?
 - Interested faculty can reach out to Andrew Kirby or DSRI for ways to get connected