HPC Carpentry

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What's been done so far?

- BOF at Supercomputing 17
- Two lessons developed + being used

hpc-in-a-day: https://psteinb.github.io/hpc-in-a-day//
hpc-intro: https://hpc-carpentry.github.io/hpc-intro/

BoF Learner Profile

- vague idea of what HPC is but not sure how this translates to their research
- lack of experience in general with Linux, command line, text editors, batch systems, etc.
- lack of knowledge about what HPC systems actually are
- want to know how to support themselves when things don't work, keen to learn more

our (CC) consensus: preponderance towards "too novice"

Prerequisites:

BoF: basic linux shell use + scripting

hpc-intro: no real prerequisites, prior programming and command-line experience helpful [mixed message]

hpc-in-a-day: should be able to write small programs with a language of your choice + command line

Different groups

- people who want to develop parallel applictions
- people who want to have parallel applications
- people who have something on their desktop that they just need to run elsewhere (cloud/server/HTC)

Suggestions for names instead of "HPC Carpentry" that better reflects the goals

"Scalable Carpentries"

"Carpentries Beyond the Desktop"

Scalable / Beyond desktop sounds good!

- Common use-case is logging into a server with more RAM. (e.g. large to handle input files; may not involve programming; but calling a program, collect output = scripting)
- But there are also many researchers who use Supercomputers/Large clusters.
- Cloud computing (perhaps too vendor-specific)?

Will need flexibility for different audiences!!

Try to identify a core that people need to know

Greg: maybe think about what you're NOT going to teach to help isolate the core Jonah: use mastery rubrics

Homework: mental model that we would like to help to build to our learners.

Draw a concept map by the end of the conference! (or better bring it to the workshop tomorrow!)