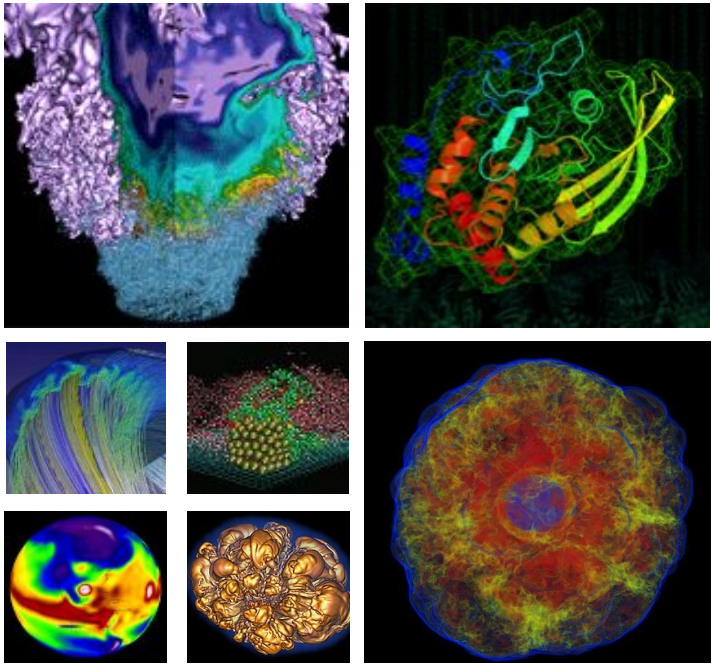
NUG Monthly Meeting



NERSC

19 August, 2021

U.S. DEPARTMENT OF ENERGY | Office of Science

BERKELEY LAB
Lawrence Berkeley National Laboratory

Today's plan

- Interactive - please participate!
  - Raise hand or just speak up
  - **NERSC User Slack** (link in chat), **#webinars** channel

- Agenda:
  - Win-of-the-month
  - Today-I-learned
  - Announcements/CFPs
  - Topic of the day: **The NUG Executive Committee**
  - Coming meetings: topic suggestions/requests?
  - Last month's numbers

Win of the month

Show off an achievement, or shout out someone else's achievement, e.g.:

- Had a paper accepted
- Solved a bug
- A scientific achievement (maybe candidate for Science highlight, or **High Impact Scientific Achievement award**)
- An **Innovative Use of High Performance Computing** (also a candidate for an award) (https://www.nersc.gov/science/nersc-hpc-achievement-awards/)

Please let us know of award-worthy work from you or your colleagues - tell us what you did, and what was the key insight?

Today I learned

What surprised you that might benefit other users to hear about?

(and might help NERSC identify documentation improvements!)

Eg:

- Something you got stuck on, hit a dead end, or turned out to be wrong about
  - Give others the benefit of your experience!
  - Opportunity to improve NERSC documentation
- A tip for using NERSC
- Something you learned that might benefit other NERSC users

"If we knew what it was we were doing, it would not be called research, would it?" - Einstein

Announcements and CFPs

See weekly email for these and more:

- Upcoming Cori OS update - September
  - New Programming Environment (default modules)
  - Statically-linked executables likely to need re-link
- Cori Burst Buffer currently unavailable
  - BB jobs will be just sitting in queue
  - Watch weekly email for updates
- ERCAP opens September 7
  - A few changes from previous years
  - Next NUG meeting topic-of-the-day will be about ERCAP
- Allocation reductions September 7

Announcements and CFPs

See weekly email for these and more:

- Better Scientific Software 2022 Fellowship Program Applications Now Open
  - Foster practices, processes, and tools to improve scientific software productivity and sustainability
  - Up to $25k grant
- CFPs:
  - Women in HPC Workshop (in conjunction with SC21)
  - International Workshop on Performance, Portability, and Productivity in HPC (in conjunction with SC21)
  - SuperCheck-SC21

Announcements and CFPs

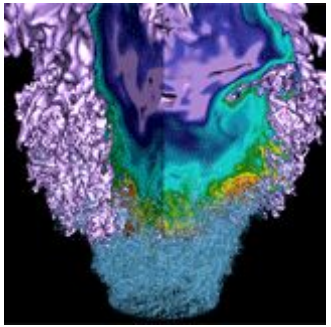
See weekly email for these and more:

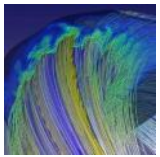
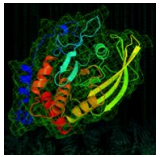
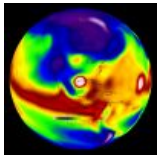
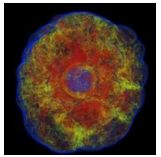
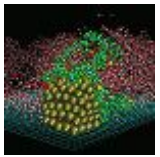
- Training:
  - CMake Training, August 23-26
  - Intro to Kernel Performance Analysis with NVIDIA Nsight Compute, August 26
  - Variorum for Portable Power Management Code, August 20 & 27
  - Facility Testing of E4S via E4S Testsuite, Spack Test, & buildtest, September 14
  - IDEAS-ECP Webinar on Leading Open Source Projects on September 15
  - E4S Deep Dive - October 4

Announcements and CFPs

- Others?

The NUG Executive Committee



NERSC

What is NUG?

- The NERSC User Group (NUG), which includes all active NERSC users, is **a forum for users to communicate with each other** and NERSC staff to the benefit of the NERSC user community.
- Activities include **discussing use of NERSC**, **sharing knowledge and experience**, hearing from representatives of NERSC and its stakeholders, and engaging in other related activities, including participating in special interest working groups and **having interactions with other relevant groups** like the Society for Science at User Research Facilities (SSURF).
- NERSC hosts a NERSC Users slack channel where users can interact with other NERSC users.
- NERSC hosts an annual NUG meeting, open to all users. The annual meeting often includes presentations by NERSC, its Department of Energy sponsors, NERSC users, computer vendors, and training and workshops.

What is NUGEX?

- The NUG Executive Committee (NUGEX) is a group of NERSC users who **oversee NUG activities for the benefit of NERSC's user community** of over 8,000 researchers from all scientific domains within the DOE Office of Science.
- Typical NUGEX activities:
  - Helping identify HPC needs from NERSC users & scientific communities
  - Helping identify training needs for NERSC users
  - Providing topics or activities related to the NUG annual meeting
  - Coordinating activities at meetings and conferences where NERSC users and/or NERSC staff contributions would be valuable
  - Receiving updates from NERSC on important topics

How does it work? What's involved?

- **All NERSC users are invited to volunteer to serve on NUGEX** and NERSC will select representatives with the aim of representing a diverse and broadly inclusive span of NERSC users, projects, and HPC needs

- NUGEX will meet regularly (up to 1 hour per month), with NERSC staff, for activities such as:
  - Identifying HPC needs from NERSC users & scientific communities
  - Identifying training needs for NERSC users
  - Providing topics or activities related to the NUG annual meeting
  - Coordinating activities at meetings and conferences where NERSC users and/or NERSC staff contributions would be valuable
  - Proposing and scheduling monthly NUG user meeting topics
  - Receiving updates from NERSC on important topics

NOTE: In past years we have held elections for NUGEX, but only about 0.1% of users participated in the election and the results didn't necessarily result in broad diversity across scientific fields and other dimensions.

How does it work? What's involved?

- NUGEX members serve for 2-3 years, as long as they continue to be active NERSC users

- The NUGEX chair and co-chair, are chosen from among NUGEX members
  - Serve as the primary points of contact for NUGEX
  - Advise on the structure and content of annual meeting
  - Serve 1-year terms, co-chair succeeds chair

- Terms are staggered so about ⅓ to ½ of NUGEX is replaced each year

Why should I get involved?

- **Contributing to the NERSC user community:** your input will help NERSC best serve the needs of researchers supported by the DOE Office of Science
- **Inner circle:** you'll get insights into how NERSC works, and be able to alert NERSC to concerns or events in your scientific community
- **Cross-pollination:** you'll be working with people from diverse scientific domains, with innovative approaches to challenges

Timeline

We're seeking volunteers and nominations until the **end of August**, and will select new members early in September

We will have the NUG Annual meeting in **October**, at which the retiring and continuing committee members will be recognised and the incoming committee members announced

The new committee will begin its tenure in **January** (but are invited to join NUGEX meetings during the period up until then)

Volunteer for NUGEX

To volunteer or suggest a colleague you think would be good and enjoy the position please fill in this short form: https://forms.gle/B9XofSmfstuQzVrh8

Thank You

Coming up

September: Walk through the ERCAP process

October: NUG Annual meeting - in lieu of the monthly meeting

November: (tentatively) A presentation of some of the work of one of our regular participants

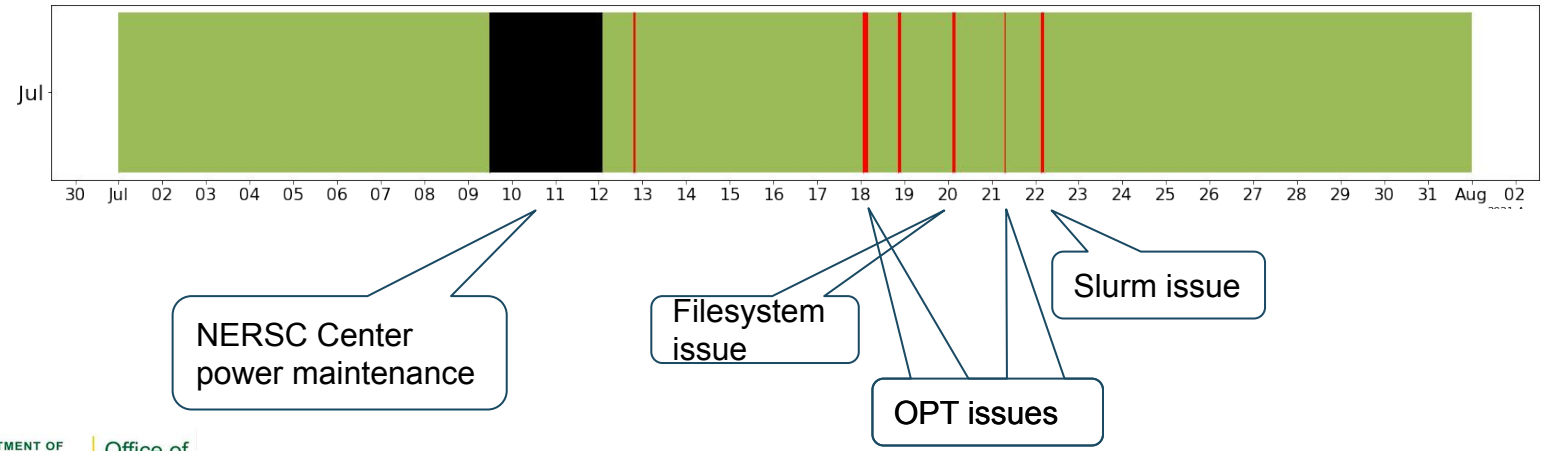
We'd love to hear some lightning talks **from NERSC users** about the research you use NERSC for!

Last month's numbers - July

Scheduled and overall availability:

	Scheduled	Overall
Cori	99.1%	90.8%
HPSS	99.8%	89.2%
CFS	100.0%	100.0%

Cori: 7 outages (6 unscheduled totaling 10 hrs 0 min)



Last month's numbers - July

Cori Utilization: 94.2%

Large jobs: TBA%

New Tickets: ~~694~~ TBA

Closed Tickets: ~~631~~ TBA

Backlog at 1 May: ~~529~~ TBA

Thank You