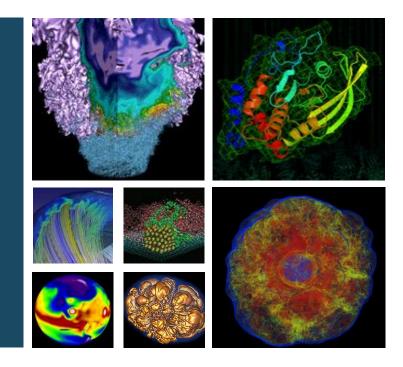
# NUG Monthly Meeting





15 July, 2021





## 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: Energy Efficiency
  - 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) (<a href="https://www.nersc.gov/science/nersc-hpc-achievement-awards/">https://www.nersc.gov/science/nersc-hpc-achievement-awards/</a>)

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:

New Slurm behavior: jobs running multiple things per node now need --overlap

```
#SBATCH -N 1
srun -N1 -n1 --overlap ./thing1 &
srun -N1 -n1 --overlap ./thing2 &
wait
```

(most "typical" jobs are not affected by this)

- Upcoming Cori OS update September
  - New Programming Environment (default modules)
  - Statically-linked executables likely to need re-link





### **Announcements and CFPs**



#### See weekly email for these and more:

- CFPs:
  - 8th Workshop on Accelerator Programming using Directives (WACCPD 2021)
  - Parallel Applications Workshop, Alternatives to MPI+X (at SC21)
  - SuperCheck-SC21
- Training:
  - ECP-IDEAS webinar: Multi-Institutional Scientific Software Development, August 4
  - CUDA Multithreading with Streams, July 16
  - CMake Training, August 23-26





### **Announcements and CFPs**



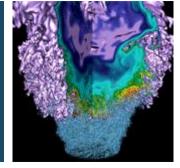
#### See weekly email for these and more:

- Software stack: E4S Version 21.02 Now Available on Cori
  - 45 E4S packages, including Adios2, HDF5, PAPI, SLEPc, SuperLU, Tau, and UPCXX
  - module load load e4s/21.02 makes E4S modules visible with "module avail", sets up a Spack environment





# **Energy Efficiency at NERSC**



















# **Coming up**



August: (tentatively) - walk through the ERCAP process

Topic requests/suggestions?

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



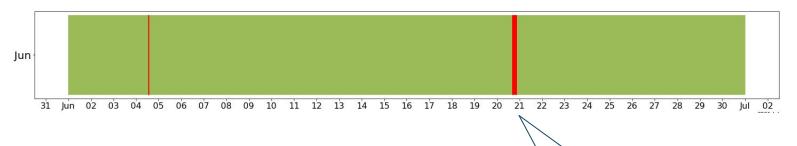


### Last month's numbers - June



Scheduled and overall availability:	Scheduled		Overall
	Cori	99.8%	99.8%
	HPSS	100%	99.5%
	CFS	100%	100%

Cori: 2 outages (2 unscheduled totaling 6 hrs 40 min)



System degraded due to cabinet hardware failure





### Last month's numbers - June



Cori Utilization: 94.4%

Large jobs: 33.6%

New Tickets: 694

Closed Tickets: 631

Backlog at 1 May: 529







**Thank You** 



