

OLCF Overview

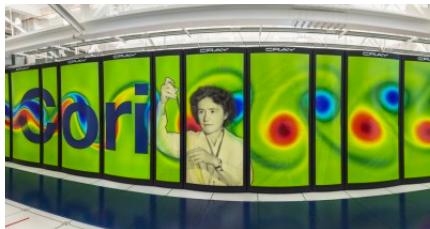
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ORNL is managed by UT-Battelle, LLC for the US Department of Energy

DOE's Office of Science Computation User Facilities



NERSC
Cori is 30 PF



ALCF
Theta is 12 PF



OLCF
Summit is 200 PF

- DOE is leader in open High-Performance Computing
- Provide the world's most powerful computational tools for open science
- Access is free to researchers who publish
- Boost US competitiveness
- Attract the best and brightest researchers

Primary Allocation Programs for Access to OLCF

- Similar to Argonne, several allocation programs
 - INCITE
 - ALCC
 - Director's Discretion
- INCITE and ALCC are annual calls for proposals
- DD applications accepted year-round

Primary Allocation Programs for Access to OLCF

For more information, or to apply, please see the following links:

General Info on User Programs	<u>https://www.olcf.ornl.gov/for-users/getting-started/#request-allocation</u>
INCITE	<u>http://www.doeleadershipcomputing.org/</u>
ALCC	<u>https://science.osti.gov/ascr/Facilities/Accessing-ASCR-Facilities/ALCC</u>
DD	<u>https://www.olcf.ornl.gov/for-users/documents-forms/olcf-directors-discretion-project-application/</u>

OLCF Changes in 2019

- New Resources
 - Summit
 - Alpine filesystem
- Decommissioned Resources
 - Titan
 - Eos
 - Atlas filesystem

Summit

- 4,608 IBM AC922 nodes
 - 2 x IBM POWER9™ Processor (9,216 total)
 - 6 x NVIDIA Volta™ GPU/Accelerator (27,648 total)
 - 512 GB DDR4 + 96 GB HBM2 + 1600 GB NVRAM
 - ~42 TF peak performance
- ~200 PF peak performance
- 250 PB filesystem (GPFS)





<https://www.olcf.ornl.gov/frontier/>

OLCF Training

- <https://www.olcf.ornl.gov/for-users/training/>
 - Training archive
 - Training calendar
 - Tutorials
- <https://vimeo.com/channels/olcftraining>

Questions?

- Feel free to ask me in Slack
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