

Allocation Programs at OLCF

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Oak Ridge Leadership Computing Facility (OLCF)

Oak Ridge National Laboratory (ORNL)

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



U.S. DEPARTMENT OF
ENERGY

SummitPLUS

- Summit remains a powerful and reliable instrument for scientific discoveries five years after its debut
 - 2nd most powerful supercomputer in the U.S.
 - 5th on June 2023 Top500 list
- DOE is extending Summit operations through October 2024
- SummitPLUS is a new allocation program on Summit for 2024

SummitPLUS

- Applications are open through October 30, 2023
- Computationally ready projects are invited to apply
 - Open to researchers from academia, government laboratories, federal agencies, and industry regardless of funding
 - Proposals are welcome from team who are new to Summit as well as previous INCITE, ALCC, DD, ERCP awardees
 - ML/AI, data-intensive computing, and cross-cutting proposals are encouraged
- Typical award size: 100,000 - 250,000 node hours
Allocation: January - October 2024
- Reviewed by subject matter & computational experts; award announcement in November 2023
- <https://www.olcf.ornl.gov/summit-plus/>

Allocation Programs At OLCF

	Director's Discretionary (DD)	INCITE	ALCC
Allocation Size	Small (~20,000 NH)	Large (≥ 1 MNH)	Large
Duration	≤ 12 months	1 Year	1 Year
Call for Proposals	Any time	Annually	Annually
Job Priority	Medium	High	High
Purpose	Code devel, porting, some simulation campaigns, preparing for INCITE / ALCC <i>Industry DD available</i>	Intensive research project, simulation campaigns	Intensive research project, simulation campaigns

INCITE Allocation

Innovative and Novel Computational Impact on Theory and Experiment

- DOE sponsored program, jointly run by OLCF and ALCF to allocate 60% of allocatable hours on LCF flagship systems
- Intended for compute- and/or data-intensive large scale research projects that address “grand challenge” problems
 - Leadership criterion: Project that cannot be done anywhere else
 - Open to researchers from academia, government laboratories, federal agencies, and industry **regardless of funding source**
- Each INCITE project is assigned a scientific liaison from OLCF
 - Help ensure that the project can achieve its scientific goals
 - Ranges of collaboration depth

INCITE Allocation

Innovative and Novel Computational Impact on Theory and Experiment

- Resources are available to help writing a proposal:
 - INCITE proposal writing webinar;
 - INCITE proposal development (new)
 - Collaborate with OLCF computational scientist / liaison
- New Early Career path
 - INCITE commit ~10% of allocatable hours to support and encourage next generation researchers
 - Project must still be meritorious in peer review
- Anticipate April 2024 for INCITE 2025 call to open

Director's Discretionary (DD) Allocation

- OLCF DD program allocates ~10% of the available Frontier hours in a calendar year
- Award size: 15,000 - 20,000 node hours for 1 months - 1 year
- Intended for
 - preparations for INCITE & ALCC proposal development (scaling, benchmarking)
 - some code development / porting
 - exploratory / pilot projects that may graduate to INCITE or ALCC
- Reviewed by the OLCF Resource Utilization Council and independent referees at ORNL
- Application are accepted year-round

ASCR Leadership Computing Challenge (ALCC)

- ALCC allocates ~30% of available hours at LCF resources to serve as DOE/SC capability computing program
- Intended for high-risk, high-payoff projects of interest to the DOE in areas directly related to DOE mission
- Eligibility: available to researchers from universities, industry, and government agencies DOE sponsorship is not required.
- Yearly allocation cycle: July 1 - June 30
- Next allocation pre-proposal due on November 13, 2023
- <https://science.osti.gov/ascr/Facilities/Accessing-ASCR-Facilities/ALCC>

An aerial photograph of a large, modern, multi-story building complex, likely a university or research facility. The building has a prominent central section with a circular feature on its roof. It is surrounded by a large, green, rectangular courtyard with a paved walkway. In the background, there are dense green trees and a parking lot filled with cars. The overall scene is bright and sunny.

Thank You

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