News

Feature Highlight Summary

Advancing the Additive Manufacturing Revolution

The methods used to fabricate metal parts have changed remarkably little in the past few centuries

Source: ECP

Clover: A Trifecta of Vendor-Agnostic, GPU-Accelerated Numerical Libraries

Numerical libraries have an enormous impact on scientific computing because they act as the gateway middleware that enables many applications to run on state-of-the-art

Source: ECP

EXAALT researchers explore speculative task methods to improve scalability

A team working on the ECP's Exascale Atomistic Capability for Accuracy, Length, and Time (EXAALT) project has developed a task-level speculative method

Source: ECP

WHAT ARE EXASCALE AND THE EXASCALE COMPUTING PROJECT?

Exascale is the next milestone achievement in computing, offering 1,000 times more speed and power than today's most advanced supercomputers. The US Department of Energy's ECP aims to ensure that all the necessary pieces are in place for the nation's first exascale systems.

IN THE NEWS

DOE Exascale Computing Project to Advance Metal AM
3dprinting.com

EQSIM shakes up earthquake research at exascale
Scientific Computing World

Exascale Computing Project Details EQSIM's Progress in Advancing Earthquake Research
HPCwire

More

Upcoming Training Events

ECP Tutorial Days
February 6, 2023 - February 10, 2023

2023 ECP Community BOF Days
February 14, 2023 - February 16, 2023

Strategies for Inclusive Mentorship in Computing
March 16, 2023

More

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Exascale Computing Project · Episode 101: Discussing NERSC's Unique Global Role and Close Collaboration with ECP

Latest Episodes

Episode	Title	Guest	Time
101	Discussing NERSC's Unique Global Role and Close Collaboration with ECP	Richard Gerber	29:39
100	Reflecting on the 'Why' behind Supercomputing Simulations: Advancing Science	Bronson Messer	28:03
99	ECP's WarpX Team Successfully Models Promising Laser Plasma Accelerator Technology	Jean-Luc Vay, Axel Huebl, Henri Vincenti, and Luca Fedeli	32:14
98	Providing Exascale-Class Multiphysics Simulation Capability to Multiple Science Domains	Anshu Dubey and J. Austin Harris	29:55
97	Enabling Highly Accurate and Reliable Predictions of the Basic Properties of Materials"	Paul Kent	22:27
96	Leveraging Machine Learning for Computational and Experimental Science and Engineering	Logan Ward	18:26
95	Enabling Cross-Project Research to Strengthen Math Libraries for Scientific Simulations	Natalie Beams	24:23

Featured Videos

IDEAS-ECP Webinar: Openscapes — supporting better science for future us

IDEAS-ECP Webinar: Lab Notebooks for Computational Mathematics, Sciences & Engineering

Twitter

Exascale Computing Project @exascaleproject · 3h

February 6–10: the virtual ECP Tutorial Days, covering best practices for exascale-era systems. Among the topics: power management on #exascale platforms, performance evaluation using TAU, auto-tuning tools, and more. Visit the ECP website to sign up! https://tinyurl.com/xdhhyyp5 #HPC

2 3 Twitter

Exascale Computing Project @exascaleproject · 29 Jan

ICYMI: The Exascale Computing Project 2023 Community Birds-of-a-Feather Days are February 14–16. The event enables the #hpc community to engage with ECP teams. Find out 👀 more on ECP's website, including details about the various sessions! https://tinyurl.com/y56px5pd #exascale

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Exascale Computing Project @e 28 Jan

ICYMI: The Exascale Computing 2023 Community Birds-of-a-Fea are February 14–16. The event e #hpc community to engage witl Find out 👀 more on ECP's webs including details about the vario https://tinyurl.com/y56px5pd #

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