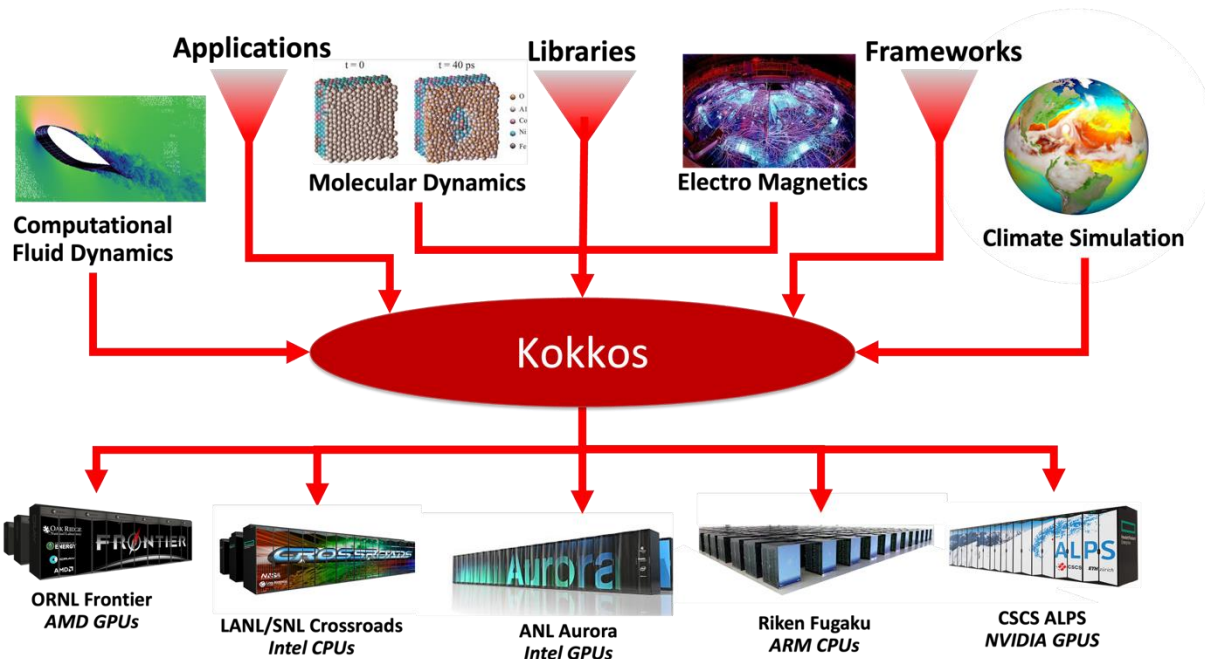




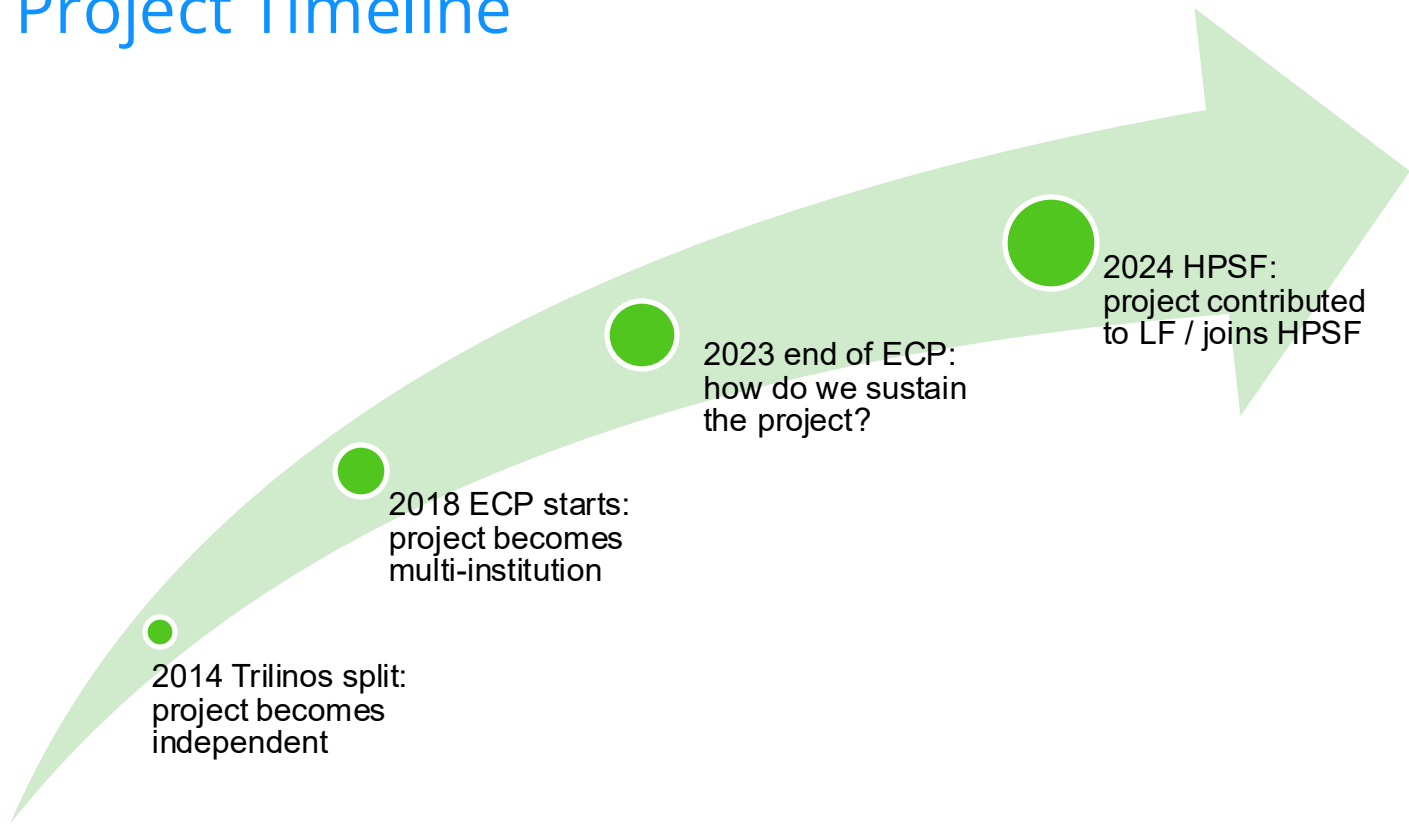
The Kokkos Journey to HPSF

Damien Lebrun Grandié (ORNL) & Luc Berger-Vergiat (SNL)
Birdaro 2025 Lightning Talk, October 30th, 2025

What is Kokkos?

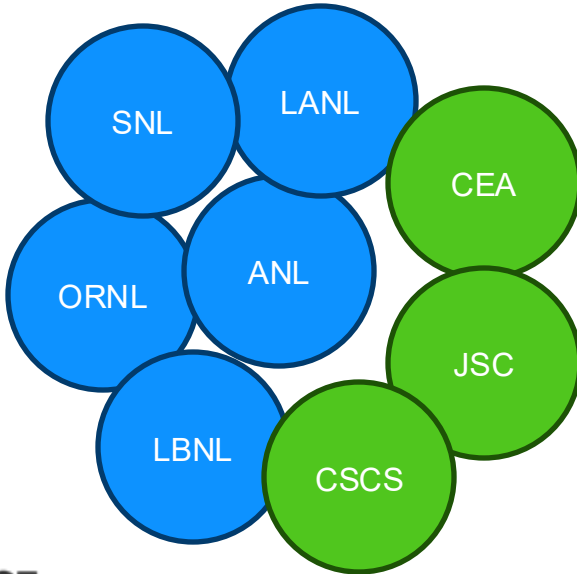


Kokkos Project Timeline

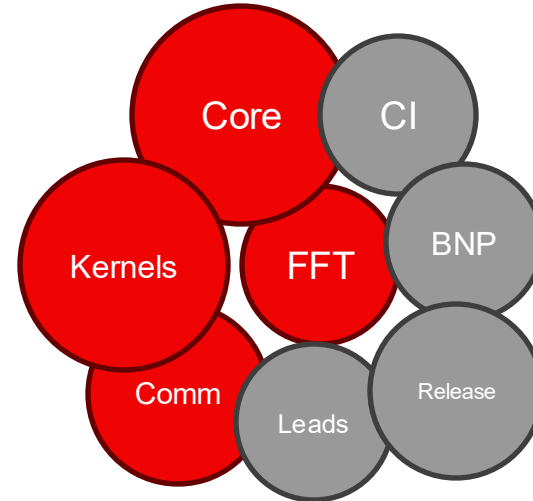


Kokkos Project Structure

Multiple institutions in U.S. and Europe



Multiple teams and working groups



Kokkos Needed a New (Neutral) Home



The Challenge: Success Outgrows the Structure

- Grew from a single lab (SNL) to 5 US DOE Labs and international partners (CEA, CSCS).
- The vital **ECP umbrella** (funding, common goals) ended in 2023.

Seeking Sustainability

- Required a permanent, vendor-neutral home for long-term governance and stability.
- Needed a simpler way to organize user meetings and receive vendor support (donations, hardware).

Strategic Alliance

- Joined forces with the **Spack** project, which faced the same challenges, instead of creating a standalone consortium.
- Gained encouragement from DOE HQ for a consolidated effort.

Solution: The HPSF

- Together, we successfully launched the High Performance Software Foundation in Spring 2024 to secure the future of projects like Kokkos.

The High Performance Software Foundation



Performance



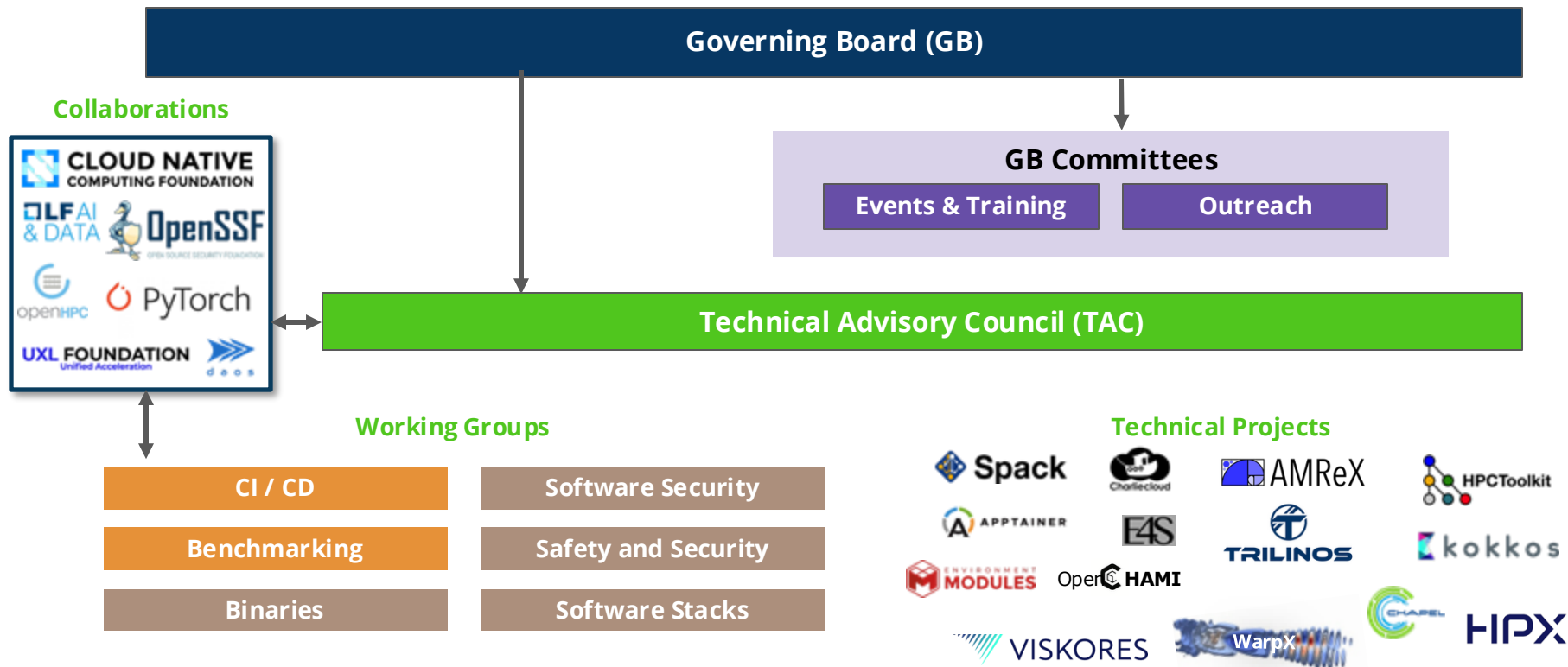
Portability



Productivity

1. A **neutral** hub for **open source, high performance** software
2. **Supports** projects that advance portable software for diverse hardware by:
 - a. Increasing adoption
 - b. Aiding community growth
 - c. Enabling development efforts
3. **Lower barriers** to productive use of today's and future high performance computing systems

HPSF Charter



HPSF Members

Premier



General



Associate



What's in it for Projects?

Vendor-Neutral Home & Stability

Ensures project independence and long-term sustainability under the Linux Foundation.

Infrastructure & Automated Testing

Access dedicated hardware and CI/CD Working Group support for robust automated testing and benchmarking.

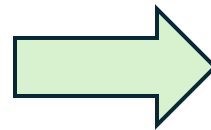
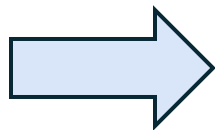
Growth, Branding & Focus

HPSF handles legal, marketing (websites, new logos), and community growth, letting your team focus on the code.

Collaboration & Events

Host user groups at the annual HPSF Conference and facilitate multi-institutional collaboration and workforce development.

HPSF project lifecycle as a path to sustainability



Emerging

- Libre, open source, vendor-neutral HPC project
- Committed to open governance
- Working towards best practices

Established

- Wide usage by at least 3 organizations
- Steady development
- Robust development practices & processes, open to new developers

Core

- Steady development from multiple organizations
- No single organization has a majority in governance
- Sustainable cycle of development and maintenance



HPSF

HIGH PERFORMANCE
SOFTWARE FOUNDATION

hpsf.io