

## **SOS27: Abstract for session “The Role of Non-GPU Accelerators and Chiplets in Future HPC Systems”**

The session "The Role of Non-GPU Accelerators and Chiplets in Future HPC Systems" at SOS27 will explore the evolving landscape of high-performance computing (HPC) architectures, focusing on the integration of unique accelerators and chiplet technology. As the demand for computational power continues to surge, traditional GPU-centric approaches are being complemented by innovative solutions that leverage specialized accelerators, FPGAs, ASICs, and Dataflow solutions, all alongside modular chiplet designs. This session will delve into the advantages of these technologies, including enhanced performance, energy efficiency, and scalability, while addressing the challenges of programming, cost, and system integration. Attendees will engage in discussions on real-world applications, case studies, and future trends, equipping them with insights to navigate a potential Cambrian explosion of new HPC architectures more effectively.