

HPC User Forum Agenda **86th HPC User Forum**

October 21 & 22, 2024 – Barcelona Supercomputer Center

Meeting Address: Plaça Eusebi Güell, 1-3, 08034 Barcelona

Meeting focus areas:

- *Major ways to use AI & GPUs in HPC*
- *BSC as a testbed & developer of new technologies, RISC-V for HPC applications*
 - *Quantum computing futures*

Monday, October 21, 2024

13:00-14:00	Welcome Lunch, UPC Premises
14:00-14:15	Welcome by Rupak Biswas and Earl Joseph, BSC Welcome (Fabrizio Gagliardi+ Xavier Martorell) then Fabrizio Gagliardi introduce BSC Director and Founder Mateo Valero
14:15-14:45	Mateo Valero Update on BSC Past, Present and Future
14:45-15:00	Hyperion Research Market Update, Earl Joseph, Hyperion Research
15:00-15:30	MN5 Presentation, Design Choices, Challenges and Future Plans (Sergi Girona)
15:30-15:45	Vendor Update: Eviden
15:45-16:15	RISC-V and New ISAs, Marc Casas, BSC TBC
16:15-16:45	Networking Coffee Break
16:45-17:15	BSC as a Testbed for New Computer Types, New Processors, the Build Not Buy Model and the DARE RISC-V Initiative, Mateo Valero & Open Chip Chief Technology Office
17:15-17:30	Vendor update: Manuel Arenaz, Program Analysis Technologies with LLVM Targeting HPC Codes
17:30-18:00	HPC Site Update: HPC and AI at CERN, Maria Girone, CERN
18:00-19:00	Visit of the MN5 Supercomputer, Sergi Girona
19:00	Adjourn and Free Evening

Tuesday, October 22, 2024

08:30-09:25	Networking Breakfast
09:25-09:30	Welcome/Logistics
09:00-09:30	EuroHPC Update, e.g., The AI Factory, Eugene Griffith, BSC-CNS
09:30-10:00	HPC Workflows at BSC, Rosa Badia, BSC-CNS,
10:00-10:30	AI in Life Science, LLMs and TPC, Jose Carbonell, BSC
10:30-11:00	Optimizing Climate Models with Accelerators and Emerging Technologies, Mario Acosta, BSC
11:00-11:30	Networking Coffee Break
11:30-12:00	Quantum Computing at BSC, Artur Garcia and Alba Cervera-Lierta, BSC
12:00-12:15	Vendor Update: Lenovo
12:15-12:45	HPC and QC at NASA Rupak Biswas, NASA
12:45-13:15	The Use of Quantum Computing Around the World, Bob Sorensen, Hyperion Research
13:15-13:30	Vendor Update: QuEra
13:30 - 14:00	Towards an AI-autonomous HPC World, Pedro Valero, Oak Ridge National Laboratory (ORNL)
14:00-14:30	Argonne National Laboratory (ANL) Update, David Martin, ANL
14:30-14:35	Meeting Wrap Up, Fabrizio Gagliardi, Rupak Biswas and Earl Joseph
14:35	Networking Buffet Lunch