

EuroHPC User Days - Programme

Day 1 – Tuesday 30 September

Time	Session	Speakers	Room
09:00–10:00	Moderation by Josephine WOOD , Head of Unit Strategy and Governance, EuroHPC Joint Undertaking		Queen’s Hall (Black Diamond)
	Opening Plenary	<ul style="list-style-type: none">• Anders JENSEN, Executive Director, EuroHPC Joint Undertaking• Annemarie FALKTOFT, Danish Agency for Higher Education and Science, Deputy Director-General• Gitte Julin KUDSK, Director, Danish e-Infrastructure Consortium (DeiC)• Chris RICHARDSON, Chair, User Forum Coordination Group• Luigi DEL DEBBIO, Chair, EuroHPC Access Resource Committee	
	EuroHPC JU & Infrastructure Update	Evangelos FLOROS , Head of Unit Infrastructure, EuroHPC JU	
10:00–11:00	Coffee Break & Networking		
11:00–12:30	Moderation by Pauline GOUNAUD , Head of Communication Sector, EuroHPC Joint Undertaking		Queen’s Hall (Black Diamond)
	Access Modes	Klara MEŠTROVIĆ , Head of Sector Peer Review, EuroHPC Joint Undertaking	
	Accessing EuroHPC Systems: Do’s & Don’ts	Luigi DEL DEBBIO , Chair, EuroHPC Access Resource Committee	
	Accessing EuroHPC Support Services	Laura MORSELLI , MINERVA project Guy LONSDALE , FFplus project Natalie LEWANDOWSKI , CASTIEL project Janne IGNATIUS , EPICURE project	
12:30–14:00	Lunch Break: Meet & Greet with EuroHPC supercomputers and AI Factories		
Parallel Sessions on Use Cases			
14:00–15:30	Chemical Sciences	Moderation by Daniel OPALKA , Head of Unit Research and Innovation, EuroHPC Joint Undertaking	DAC (Danish Architecture Centre)
		Massimo BOCUS : <i>Pushing the limits of computational chemistry: the phase diagram of water</i>	
		Javier ORTIN : <i>CoSSPIA – Computational Screening of Sustainable Polymers for Industrial Applications</i>	
	High Energy Physics	Moderation by Maria GIRONE , Head of CERN Openlab & Vice-Chair User Forum	Blixen Room (Black Diamond)
Frederic BONNET : <i>Benchmarking lattice quantum field theory codes across EuroHPC platforms for physics beyond the standard model on physical systems</i>			

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		Alessandro GABBANA: <i>Multi-GPU porting of a phase-change cascaded lattice Boltzmann method for three-dimensional pool boiling simulations</i>	
		Szabolcs BORSANYI: <i>The QCD crossover line in a finite volume</i>	
		Giannis KOUTSOU: <i>Large-scale simulations of lattice QCD for nucleon structure using N_f=2+1+1 flavors of twisted mass fermions</i>	
		Paolo VALVO: <i>Hierarchical Dynamic Load Balancing Strategy for a p-adaptive Discontinuous Galerkin Compressible LES Solver</i>	
	Engineering	Moderation by Kaare MIKKELSEN , Associate Professor Dep. of Electrical and Computer Engineering, Biomedical Engineering University of Aarhus	Queen’s Hall (Black Diamond)
		Chris RICHARDSON: <i>An efficient multigrid solver for finite element methods on multi-GPU systems</i>	
		Allan BEURVILLE: <i>Sonic Fan Large Eddy Simulation</i>	
		Arivazhagan G. BALASUBRAMANIA: <i>Elasto-Inertial Turbulence in Complex Fluids (EITCF)</i>	
		Yu-Hsiang TSAI: <i>Enabling Ginkgo as numerics backend in nekRS employing a loosely-coupled configuration file concept</i>	
15:30–16:30	Coffee Break & Networking		
16:30–18:00	Panel on AI Factory support to users		Queen’s Hall (Black Diamond)
	Moderation by Rafal DUZCMAL , Chair, EuroHPC Joint Undertaking Governing Board		
18:00–20:00	Welcome reception & Networking		

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Day 2 – Wednesday 1 October

Time	Session	Speakers	Room
09:00–10:30	Moderation by Chris RICHARDSON , Chair, User Forum		Queen’s Hall (Black Diamond)
	User Forum	Introduction	
		Panel discussion on Governance, moderated by Sinead RYAN	
		Panel discussion on Users, moderated by Thomas GEENEN	
10:30–11:30	Coffee Break & Networking		
Parallel Sessions on Use Cases			
11:30–13:00	Earth System Sciences	Moderation by Catarina GUERREIRO , Project Officer Infrastructure, EuroHPC Joint Undertaking	DAC (Danish Architecture Centre)
		Miguel DE LE COURT : <i>Multiscale ocean modelling: bridging the gap between global changes and local impacts</i>	
		Tommaso BENACCHIO : <i>Improving the scalability of a high-order atmospheric dynamics solver based on the deal.II library</i>	
		Thomas GEENEN : <i>AIFS-ensemble</i>	
	Life Sciences, Physiology and Medicine	Moderation by Martijn OLDENHOF , Project Officer Research and Innovation, EuroHPC Joint Undertaking	Blixen Room (Black Diamond)
		Fabio MINAZZI : <i>Voice for Purpose 2: Enabling expressive conversations with patients with permanent voice loss and movement paralysis</i>	
		Pablo NAVARRO : <i>ModTox Platform</i>	
		RICARDO NOBRE : <i>Porting Epistasis Detection Methods to EuroHPC Supercomputers</i>	
		Xavier SEVILLANO : <i>Unsupervised artificial intelligence models for Down syndrome neuroimaging research: from automatic brain alteration detection to the generation of synthetic 3D magnetic resonance images</i>	
	Artificial Intelligence for Science	Moderation by Eske CHRISTIANSEN , Head of HPC Department, DeiC	Queen’s Hall (Black Diamond)
		Evangelos KAZAKOS : <i>A universal approach for video understanding tasks with language grounding</i>	
		Alexander SHVETS : <i>Towards Linguistic Diversity: Optimizing Data Distribution for Multilingual NLP Inclusivity</i>	
		Panagiotis PAPADIMITROULAS : <i>ΔOSIMETReye: A GenAI-based tool for 3D dosimetry from 2D imaging for preclinical studies</i>	
		Jesus CARRETERO : <i>Dynamic Resources Management for Exascale in ADMIRE Framework</i>	
		PRACE : <i>Scientific and Innovation Case for HPC in Europe</i>	

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13:00–14:00	Lunch Break: Meet & Greet with EuroHPC CoEs, CASTIEL and User Forum Coordination Group		
Parallel Sessions on Use Cases			
14:00–15:30	Universe Sciences	Moderation by Laura MARTINEZ , Programme Manager Infrastructure, EuroHPC Joint Undertaking	DAC (Danish Architecture Centre)
		Nitin SHUKLA : <i>Towards Exascale Computing for Astrophysical Simulation Leveraging the Leonardo EuroHPC System</i>	
		Francesco PUCCI : <i>Cosmic ray transport in anisotropic turbulence</i>	
		Minna PALMROTH : <i>ForEshock – Magnetosheath – MAGnetosphere in 6D (FEMMA)</i>	
		Maarit KORPI-LAGG : <i>Dynamos and dynamics in the solar convection zone (DY)²SOL</i>	
	Material Sciences and Solid-State Physics	Moderation by Lilit AXNER , Programme Manager Infrastructure, EuroHPC Joint Undertaking	Blixen Room (Black Diamond)
		Luis TEIXEIRA : <i>Transforming Computational Power into Environmental Solutions: HPC-driven Research on Urethanase-mediated Plastic Degradation</i>	
		Aloïs CASTELLANO : <i>Vibrational spectroscopy in defected systems</i>	
	Artificial Intelligence Industry applications	Moderation by Dennis LANGE WOLLBRINK , Head of Danish National Competence Center, EuroCC2	Queen’s Hall (Black Diamond)
		Jenny ROMANO : <i>LUCID - AI-Powered Knowledge Graphs for Fact-Based Journalism</i>	
		Derya UYSAL : <i>Enhancing Financial NLP with Supercomputing: Spell Correction and Domain-Specific BERT Pretraining</i>	
		Özay EZERCELLI : <i>Tailoring AI for Turkish Law: Domain-Specific Fine-Tuning of Small Language Models for Legal Expertise</i>	
Ilja RAUSCH : <i>Continued Pre-training of LLMs on Leonardo using EU institutional data</i>			
15:30 – 16:00	Coffee break & networking		
16:00–17:00	Final Plenary: What’s next for Users?	Moderation by Josephine WOOD , Head of Unit Strategy and Governance, EuroHPC Joint Undertaking	Queen’s Hall (Black Diamond)
		<i>Quantum in Action with PIAST-Q and VLQ</i> Krzysztof KUROWSKI (PCSS) & Konrad WOJCIECHOWSKI (PCSS) Branislav JANSIK (IT4Innovation National Supercomputing Center)	
		Award Ceremony: Best User & Best Paper Awards	
		Closing Remarks	