

Introduction to supercomputing at JSC - Theory & Practice

12:30 21.11.2022 — 12:00 25.11.2022

Day	Time	Presentation	Presenter
Monday	12:30-12:50	Welcome and Introduction to JSC	Bernd Mohr (JSC)
	12:50-13:30	HPC in a Nutshell	Ilya Zhukov (JSC)
	13:30-14:20	User Portal and Job Monitoring	I.Zhukov & J.Zjupa (JSC)
	14:20-15:00	Break	
	15:00-15:45	JupyterLab — Supercomputing in your Browser	Jens Henrik Göbbert (JSC)
	15:50-16:25	JUST and IBM Spectrum Scale: Data management	Stephan Graf (JSC)
	16:30-17:00	JSC Systems — JUWELS, JURECA & JUSUF	Damian Alvarez (JSC)
Tuesday	09:00-10:00	Hands-on I — Access	
	10:00-11:00	Hands-on I — UNIX Shell Basics	
	11:00-12:00	Hands-on I — Environment	
	12:00-13:00	Lunch	
	13:00-13:30	HPC Software — Modules, Libraries & Software	Ruth Schöbel (JSC)
	13:35-14:20	Work load management with Slurm	C.Paschoulas (JSC)
	14:20-15:00	Break	
	15:00-16:20	HPC Software - Compiler and Tools	Michael Knobloch (JSC)
16:25-17:00	Uniform Resource Access, Data Access and Cloud Resources	Björn Hagemeier (JSC)	
Wednesday	09:00-10:00	Hands-on II — Software Modules	
	10:00-11:00	Hands-on II — Custom software	
	11:00-12:00	Hands-on II — Accounting & Running Jobs	
	12:00-13:00	Lunch	
	13:00-14:20	JURECA and JUWELS –Tuning and Tweaks	Heinrich Bockhorst (Intel)
	14:20-15:00	Break	
	15:00-15:30	Proper Pinning Prevents Pretty Poor Performance	Thorsten Hater (JSC)
15:35-17:00	Using GPU accelerators on JURECA and JUWELS	Andreas Herten (JSC)	
Thursday	09:00-10:00	Hands-on III — CPU Affinity	
	10:00-11:00	Hands-on III — Using GPUs	
	11:00-12:00	Hands-on III — Remote Visualisation	Herwig Zilken (JSC)
	12:00-13:00	Lunch	
	13:00-13:40	Evolution of the Sequana System Architecture	Thomas Warschko (Atos)
	13:45-14:30	ParTec Cluster Management	Patrick Küven (ParTec)
	14:30-15:00	Break	
	15:00-15:45	Deep Learning on Supercomputers	Alexandre Strube (JSC)
15:45-16:00	Wrap Up & Discussion	I.Zhukov & J.Zjupa (JSC)	
Friday	09:00-12:00	Hands-on IV (Optional Part) — Finish what you didn't manage & Bring your own code	I.Zhukov & J.Zjupa (JSC)