

AGENDA Workshop “HPC methods for Engineering”

<http://www.hpc.cineca.it/content/hpc-methods-engineering>

Time	Wednesday 17 th June	Thursday 18 th June	Friday 19 th June
09:00-09:30	Registration	HPC for industries A. Chiarini SCAI Department, CINECA	
	HPC @ CINECA	Multi-physics	GUI, interface, pre/post processing
09:30-10:00	HPC facilities: overview and the engineering production environment I. Spisso SCAI Department, CINECA	Code_Aster & Code_Saturn, an HPC point of view XXX Da contattare Thomas Palychata @ genci.fr	Remote Viz @ CINECA F. DelliPonti / I. Spisso / L. Calori SCAI Department, CINECA
10:00-10:30	Towards the exascale race C. Cavazzoni SCAI Department, CINECA	Presentation by SCS R. Ponzini, R. Pieri, A. Chiarini	Post-Processing
10:30-11:00	HPC facilities: how to access P. Alberigo SCAI Department, CINECA	Altair Suite	Paraview
11:00-11:15	Coffee Break	Coffee Break	
11:15-11:45	SMEs enabling to benefit from HPC: The FORTISSIMO Project C. Arlandini SCAI Department, CINECA	MpCCI MetalMapper (SCAIMapper) XXX Fraunhofer SCAI	
	Computational Fluid Dynamics I	Structural Mechanics	Pre-processing meshing
11:30-12:15	The OpenFOAM technology: state of the art F. Piscaglia Department of Energy, Politecnico di Milano, Italy	HPC-based SaaS tool for motorcycle helmets design and development M. Longoni Mox-off S.r.l., Milano, Italy XX Nolan Group Spa	Snappy (A.Montorfano, PoLiMi)
12:15-13:15	OpenFOAM: an HPC perspective state. Parallel aspects and enabling on massively parallel architectures I. Spisso, G. Amati SCAI Department, CINECA	High Performance Gear Analyzer F. Pelicano, M. Barbieri, A. Zippo Dept. of Engineering “Enzo Ferrari”, University of Modena and Reggio Emilia E. Gallinaro VE&D	Pointwise (Porto)
13:30-14:30	Lunch	Lunch	Ansys Products: Ansys Mesh Solution, TurboGrid, ICEM Hexa
		Multi-Objective Optimization	Computational Fluid Dynamics II
14:30-15:00	<i>Cloud-based simulation of aerodynamics of light aircraft</i> M. Andrejašič, G. Veble Pipistrel d.o.o., Ajdovščina, Slovenija N. Bat Arctur d.o.o., Slovenija	Dakota & HPC H. Telib, J. Guerrero	
15:00-15:30	Ansys 16: Overview and accelerating Ansys Fluent simulations with Nvidia GPUs Ansys Italia	Cost, complexity uncertainty, multi-objective : a new opportunity for HPC H. Telib, J. Guerrero	OpenFOAM in Wind Energy P. Schito Polimi, Italy
15:30-16:00	SuRE HPC: Sustainable & Renewable Energy HPC A. Arcidiacono, L. Buccheri Enginsoft S.p.a., Bergamo, Italy. R. Bergamin ZECO S.r.l.	Comsol, PoliTo, progetto IS CRA E. Crevalcore Dipartimento di Scienza Applicata e Tecnologia (DISAT), Politecnico di Torino, Italy	
15:45-16:00	Coffee Break	Coffee Break	

16:00-16:45	Virtual Automatic Rapid Prototyping Based on Fast Morphing on HPC Platforms + Fast Morphing tutorial <i>M. E. Biancolini, C. Groth</i> <i>University of Rome "Tor Vergata"</i> <i>P. Di Giovanni</i> <i>HSL Italia</i>		CFD @ BSC: Alya ??
16:30-17:00	Energy conserving with OF + tutorial <i>D. Modesti, S. Pirozzoli, M. Bernardini</i> <i>UniRoma 1</i>		
			POSTER SESSION
20:30			
Legenda			
SCAI Staff	Progetto LISA con CFD XXX PoLiMi		
To be confirmed			
Confirmed			