

Annual users' meeting – September 15th, 2021

8:00 – 9:00 Welcome (on-site) and connection (remote)		
9:00-9:20	Introduction and opening remarks	B.Salha Chief Technical Officer, Head of Research and Development, EDF
9:20-9:50	V7.0 NEWS	code_saturne & neptune_cfd team

Session 1		
9:50-10:10	Atmospheric Digital Twins	M. Charwath Research Engineer, EDF R&D
10:10-10:30	Application of Code_Saturne to flow and heat transfer in turbomachinery rotating disc cavities	R. Wang PhD. Student, Faculty of Engineering and Physical Sciences, University of Surrey
10:30-10:50	Modelling buccopharyngeal droplet dispersion in an intensive care unit for Covid patients	M. Ferrand Deputy Director of CEREALAB, EDF R&D & ENPC

10:50-11:10	Morning Break
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Session 2		
11:10-11:30	Asynchronous I/O and in-situ visualization in Code_Saturne using the Damaris middleware library.	J. Bowden Research Engineer, KerData Team, INRIA
11:30-11:50	In Situ Analysis with ParaView Catalyst	F. Mazen Scientific Visualization Expert Developer and Team Leader at Kitware Europe
11:50-12:10	Yuansuan SaaS project in China and code_saturne application for aerosol transmission of HVAC system for airport	L. Zhou Technical Manager, EDF China & YuanSuan

12:10-14:00	Lunch break
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Session 3		
14:00-14:30	Pushing the limits of NEPTUNE_CFD from regional (Tiers 2) to European (tiers-0) HPC centers: an application to fluidized-bed reactors	H. Neau Research Engineer, IMFT - CNRS
14:30-14:50	Particle in fluidized bed solar receiver	R. Ansart Associate Professor, Université de Toulouse - CNRS
14:50-15:10	Counter-Current flow Limitation phenomenon modelisation using Neptune_cfd	J. Bonnici Research Engineer, EDF R&D

15:10-15:30	Afternoon break
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Session 4		
15:30-15:50	Verification and Validation of a second-order variable-density scheme for fire safety applications	L. Ma Research Engineer, EDF R&D
15:50-16:10	Multi-physics Applications of code_saturne and SALOME to Fire and Conjugate Heat Transfer in Industrial Settings	N. Tonello CEO, Renuda
16:10-16:30	Numerical simulation of transient mixed convection sodium flow experiments	C. Geffray Research Engineer, CEA

Closing		
16:30-17:00	Closing remarks	J.P. Chabard EDF R&D Scientific Director + code_saturne & neptune_cfd team