



Numeca International USER MEETING 2017

AGENDA

Monday November 13th

PLENARY SESSION

Inspiring the Way to Multiphysics and Optimization	Prof. Charles Hirsch, <i>NUMECA International</i>
Numeca at ArianeGroup	Guillaume Challier, <i>ArianeGroup</i>
NUMECA Recent Developments and short term Perspectives	Marc Tombroff, <i>NUMECA International</i>
New Generation of NUMECA Software Environment: OMNIS Multiphysics Platform	Marc Tombroff, <i>NUMECA International</i>

Coffee break

Winning the America's Cup with FINE™/Marine	Nick Hutchins, <i>Emirates Team New Zealand</i>
Solutions for Aero & Multiphysics Industry	Jonathan Brunel, <i>NUMECA International</i>
Solutions for the Turbomachinery Industry	Yannick Baux, <i>NUMECA International</i> Peter Weitzman, <i>Concepts NREC</i>
Solutions for the Marine Industry	Benoit Mallol, <i>NUMECA International</i>
SaaS: Numeca's cloud platform	Aji Purwanto, <i>NUMECA International</i> Reha Senturk, <i>TheUberCloud</i>

LUNCH

PARALLEL SESSIONS

TURBO, AERO & MULTIPHYSICS SESSION

What's new in our Turbo solution	Yannick Baux, <i>NUMECA International</i>
FINE™/Open application for light cargo aircraft	Vitaly Gubsky, <i>TsAGI</i>
Sensitivity Study on Parameters for Wake Transmission - CROR in Cruise Conditions	Gael Napias, <i>ISAE Supaero</i>
Flow simulation of low-flow rate centrifugal compressor stages	Vladimir Neverov, <i>Entechmach</i>
Optimal blade design and test validation for a diagonal turbine	Rémi Lestriez, <i>Numiberica</i>
Study of the circumferential distortion in a centrifugal compressor	Denis Voroshnin, <i>NUMECA Russia</i>

MARINE SESSION

What's new in our Marine solution	Benoit Mallol, <i>NUMECA International</i>
Using CFD for medium & high speed vessels	Niels Kleijweg, <i>CoCo Yachts</i>
Develop vessels and compare hull shape with conventional propulsion and electric propulsion	Kasper van der Heiden, <i>Jumbo Maritime</i>
Hessian-based Adaptive Grid Refinement for Hydrodynamic Daggerboard-Rudder	Alexandro Palmieri, <i>Unibo</i>
Parametric Hull and Appendage Design for Wind Farm Installation Vessel	Harry Linskens, <i>DEKC Maritime</i>
Speed-power prediction for engineering trailing suction hopper dredgers (TSHD's)	Manuel Cerro Diaz de Teran, <i>Royal IHC</i>
Experimental Validation of RANS-CFD Methodology for Wind-Assisted Ships Operating at Leeway Angles	Nico Van der Kolk, <i>TU Delft</i>



Tuesday November 14th

PLENARY SESSION

Introducing FINE™/LB: mesoscopic simulations made simple	Tim Odenthal, <i>NUMECA International</i>
Gearbox design and simulation	Barry James, <i>Romax Technologies</i>
Paving the Way: Unstructured Meshing Solutions	B.Mallol, Y.Baux, J.Brunel, N.Delsate, O.Arduino, <i>NUMECA International</i>
Integrated CFD Acoustics Solution for Tonal and Broadband Noise Prediction	Piergiorgio Ferrante, <i>NUMECA International</i>

Coffee break

Simulation and design of a full micro turbine engine	Yannick Baux, <i>NUMECA International</i>
Advanced Applications in Flow Engineering	Virginie Barbieux, <i>NUMFLO</i>
Uncertainty Quantification and Robust Design Optimization: various applications	Dirk Wunsch, <i>NUMECA International</i>
HPC	David Gutzwiller, <i>NUMECA International</i>

LUNCH

PARALLEL SESSIONS

TURBO, AERO & MULTIPHYSICS SESSION

Combustion Modeling in FINE™/Open with OpenLabs™	Jan Anker, <i>NUMECA International</i>
Hexpress™/Hybrid for combustion	Thijs Bouten, <i>OPRA Turbines</i>
FINE™/Design 3D results for compressor and axial pump optimization	Edward Childs, <i>Concepts NREC</i>
Modeling industrial burners with FINE™/Open	Cosmin Katona, <i>Europem</i>
Aerodynamic predictions of the NASA-CRM case for Jaxa workshop	Jonathan Brunel, <i>NUMECA International</i>
Modeling of unsteady phenomena in an axial compressor	Denis Voroshnin, <i>NUMECA Russia</i>

MARINE SESSION

Validation of Wind Loads on a Slender Vessel using CFD	Marco Bovio, <i>DAMEN Group</i>
Hydrodynamic comparison of T-shaped rudders	Xavier Guisnel, <i>VPLP Design</i>
FINE™/Marine applied to manoeuvrability and vortex detection	Romain Huret, <i>Sirehna</i>
Propeller analysis with FINE™/Marine in the Cloud	Leo Poppelier, <i>SIP Marine</i>



Wednesday November 15th

Optional full day of dedicated application workshops.

Get up to speed on the latest developments and modeling capabilities.

PARALLEL SESSIONS	<u>TURBOMACHINERY SESSION</u>	<u>MULTIPHYSICS SESSION</u>	<u>MARINE SESSION</u>
	Unsteady flows with the Nonlinear Harmonic method	Acoustics for external and internal aerodynamics	Propulsion simulation including FINE™/Turbo with AutoGrid5™
	<i>Coffee break</i>		
	Acoustics for turbomachinery	Lagrangian Combustion	Overset grids Trim optimization Wave generation: new guidelines
	<i>LUNCH</i>		
	Uncertainty Quantification and Robust Design Optimization Preliminary to detailed design	Uncertainty Quantification and Robust Design Optimization Introduction to OMNIS/HEXPRESS 2.2	C-Wizard in matrix mode for HPC simulations Latest guidelines and findings Rhino plugin
	<i>Coffee break</i>		
Multi-Disciplinary Optimization <i>Open Discussion</i>	Introduction to OMNIS/OPEN 2.2 <i>Open Discussion</i>	Frequently Asked Questions <i>Open Discussion</i>	