

# Day 1: Thursday 3rd November 2011

Defining new boundaries

## Paris-Chantilly 2011

Open Source CFD International Conference

### 10:00 - 11:00 Registrations & Refreshments | Exhibition

### 11:00 - 12:25 Session I

11:00 - 11:10 **Welcome by Event Organisers ICON**  
S. Weston  
Icon Ltd.; UK

11:10 - 12:00 **INVITED INDUSTRIAL APPLICATIONS KEYNOTE SPEAKER**  
**Application Of OpenFOAM® In Automotive Industry**  
R. Sundermeier  
Volkswagen AG; Germany

12:00 - 12:35 **INVITED ACADEMIC KEYNOTE SPEAKER**  
**CFD Modelling Of Internal Combustion Engines Using OpenFOAM®**  
A. Onorati  
Politecnico di Milano; Italy

### 12:35 - 14:00 Buffet Lunch Break | Exhibition

### 14:00 - 15:35 Session II

14:00 - 14:20 **Committed to OpenSource. Designed to work together.**  
P. Gommy  
SGI; France

14:20 - 14:45 **Integration Of ICON FOAMpro Into Automotive CAE Environments**  
J. Papper, S. Petropoulos  
ICON Ltd.; UK

14:45 - 15:10 **Numerical Simulation Of Bubble Column Hydrodynamics Using OpenFOAM®**  
T. Acher  
Linde Group; Germany

15:10 - 15:35 **Simulation And Optimization Of Jet Pumps For Test Facility Power Upgrading**  
M. Rehm, et. al.  
Areva NP GmbH; Germany

### 15:35 - 16:05 Poster Presentations

### 16:05 - 16:30 Discussion Break & Refreshments | Exhibition

### 16:30 - 18:05 Session III

16:30 - 16:55 **Aerodynamic Study Of Rotocraft Induced Wind Propagation**  
V. Rivola\*, et. al.  
\*R.Tech, STAC; France

16:55 - 17:20 **Heat Exchanger Fin Optimization With OpenFOAM® Using A Parametric Model Setup**  
F. Brotz, et. al.  
Behr GmbH & Co. KG; Germany

17:20 - 17:45 **Simulation Of Displacement Efficiency Using ICON FOAMpro**  
T. Clemens\*, R. Bouwman\*\*, et. al.  
\*OMV, \*\*ICON Ltd.; \*Austria, \*\*UK

17:45 - 18:05 **HPC Technologies For Intelligent Performance**  
U. Becker-Lemgau  
Intel; Germany

### 19:30- 23:00 Evening Entertainment

19:30 - 20:00 **Pre-dinner Drinks**

20:00 - 21:30 **Evening Dinner**

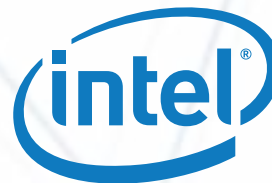
21:30 - 23:00 **Post-dinner Drinks and Entertainment**

### 23:00 Close of Day 1

### Event Organiser



### Principal Sponsor



### Standard Sponsors



### Exhibitors



### Refreshments Supported By



# Day 2: Friday 4th November 2011

Defining new boundaries

## Paris-Chantilly 2011

Open Source CFD International Conference

### 08:00- 08:30 Refreshments | Exhibition

#### 08:30 - 10:10 Session IV-A

08:30 - 08:55 **Open Source CFD Technology Applied To The Prediction Of Aerodynamics Performance Of Various Vehicle Shapes**  
C. Taucher\*, et. al.  
Ford Werke GmbH, Ford Motor Company, \*ICON Ltd.; Germany, USA, \*UK

08:55 - 09:20 **Wind Turbine Blade CFD & Mechanical Optimization Using Industrial Grade Software Tools**  
D. Speziani, et. al.  
Phitec Ingegneria Srl; Italy

09:20 - 09:45 **The Effect Of MPI Collective Operations On OpenFOAM® Performance**  
T. Liu\*, et. al.  
\*HPC Advisory Council, Hewlett-Packard; USA

09:45 - 10:10 **Tecplot Chorus - Exploring Data In Design Optimization, Configurational Analysis And Performance Prediction**  
J. Warkall  
Genias Graphics GmbH & Co KG; Germany

#### Session IV-B

**Efficient Realization Of A Resolved CFD-DEM Method Within An Open Source Framework**  
A. Hager, et. al.  
Johannes Kepler Universität Linz; Austria

**A CFD Perspective Of Bottle Cleaning Processes**  
F. Geiger\*, C. Meister\*, et. al.  
\*Hochschule RheinMain, KHS AG, Berlin Institute of Technology; Germany

**Large-Eddy Simulation Of Blood Flow Through Insufficient Mitral Valves Using A Localized Dynamic Kinetic Energy Model**  
S. Sonntag  
TomTec Imaging Systems; Germany

**Investigation Of The Unsteady Blood Flow In Cerebral Aneurysms With Stents Using The Open-Source Software OpenFOAM®**  
P. Berg, et. al.  
University of Magdeburg; Germany

### 10:10 - 10:30 Discussion Break & Refreshments | Exhibition

#### 10:30 - 11:45 Session V-A

10:30 - 10:55 **Reproduction Of Transitions Among Notes On An Air-Reed Musical Instrument With Compressible LES Combined With Moving Boundary Technique**  
Y. Ito\*, et. al.  
\*Kyushu Institute of Technology, Kyushu University; Japan

10:55 - 11:20 **Investigation Of Flow-Induced Noise From A Flow Around A Cylinder Using OpenFOAM® And CFS++ With Special Emphasis On CFD Turbulence Modelling**  
S. Moeller\*, et. al.  
\*The Virtual Vehicle Competence Center, Alps-Adriatic University Klagenfurt; Austria

11:20 - 11:45 **Large Eddy Simulation Of Hypersonic Flow Over Blunt Cones And An Entry Probe**  
S. Pandurangi\*, et. al.  
\*Mechartés Researchers Pvt. Ltd., International Institute of Information Technology; India

#### Session V-B

**CFD Simulation Of Direct Contact Condensation With OpenFOAM® Using A Locally Defined Heat Transfer Coefficient**  
C. S. Ceuca, et. al.  
Technische Universität München; Germany

**Simulation Of Wave Induced Wind Fluctuation With OpenFOAM®**  
S. Kalvig  
University of Stavanger / StormGeo; Norway

**Coupling The Turbulent Flow With The Solidification Processes In OpenFOAM®**  
A. Vakhrushev\*, et. al.  
\*University of Leoben, RHI AG; Austria

### 11:45 - 12:00 Short Break | Exhibition

#### 12:00 - 13:15 Session VI-A

12:00 - 12:25 **Coupling OpenFOAM® With Commercial Solvers**  
K. Wolf, M. Buerger  
Fraunhofer SCAI; Germany

12:25 - 12:50 **Computational Fluid Dynamics Simulation Of A Rim Driven Thruster**  
A. J. Dubas, et. al.  
University of Southampton; UK

12:50 - 13:15 **Interactive Visual Analysis Of Large And Time-Dependent CFD Data With SimVis**  
H. Doleisch  
SimVis; Austria

#### Session VI-B

**Large-Eddy Simulation Of Auto-Ignition Processes For Industrial Applications**  
F. Collonval, et. al.  
Technische Universität München; Germany

**Optimization Of An Industrial High Temperature Furnace**  
J. Nagy, et. al.  
Vienna University of Technology; Austria

**Predicting Fire Development In Enclosures - Re-Analysis Of Full-Scale Fire Tests**  
A. Amouzandeh\*, et. al.  
\*Vienna University of Technology, FCP – Fritsch, Chiari & Partner ZT GmbH, University of Innsbruck; Austria

### 13:15 - 14:20 Buffet Lunch Break | Exhibition

#### 14:20 - 16:00 Session VII

14:20 - 14:45 **ANSA - Evolution And Contribution To The Success Of CFD Simulations**  
V. Skaperdas, et. al.  
BETA CAE Systems S.A.; Greece

14:45 - 15:10 **CFD Prediction Of Pedestrian Wind Environment Around Building Using OpenFOAM®**  
M. Imano\*, et. al.  
\*University of Tokyo, Niigata University, Kajima Corporation, MTS Institute Inc., P.T.M LTD; Japan

15:10 - 15:35 **Image Based Meshing; OpenFOAM® Export For ScanIP**  
G. Tabor\*, et. al.  
\*University of Exeter, Simpleware Ltd; UK

15:35 - 16:00 **A Transient 1-D Solver For Two-Phase Flow: Solving The Flux In Complex Pipe Networks**  
B. Gschaider\*, et. al.  
\*ICE Strömungsforschung GmbH, Montanuniversität Leoben; Austria

### 16:00 Close of Event

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# Day 1: Poster Presentations

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## Paris-Chantilly 2011

Open Source CFD International Conference

### 15:35 - 16:05 Poster Presentations

- 1 **Open Source Codes For The Development Of Multilevel Modelling Of Entrained-Flow Coal Gasifiers**  
A. Aprovitola\*, et. al.  
\*Consiglio Nazionale delle Ricerche, ENEA C.R. Portici, Università degli Studi di Napoli Federico II; Italy

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- 2 **Influence Of Inlet Boundary Conditions On The Large Eddy Simulation Of Turbulent Diffusion Flames With OpenFOAM®**  
A. Aprovitola, et. al.  
Consiglio Nazionale delle Ricerche; Italy

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- 3 **A Porous Media Approach For The Flow Resistance Of A Tube-Bundle Flow Stabilizer**  
S. Erne, et. al.  
Vienna University of Technology; Austria

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- 4 **HiFlow3 - A Multi-Purpose And Hardware-Aware Parallel Finite Element Package**  
E. Ketelaer, et. al.  
Karlsruhe Institute of Technology; Germany

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- 5 **A New Combustion Model For Diesel-Engine-Foam**  
S. Kheradmand\*, et. al.  
\*Malek Ashtar University of Technology, Isfahan University of Technology; Iran

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- 6 **Modelling Of Slag Entrainment In An EAF Taphole**  
S. Koehler  
RHI AG; Austria

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- 7 **Simulation Of PET Bottle Rinsing**  
C. Meister\*, et. al.  
\*Hochschule RheinMain, KHS AG, Berlin Institute of Technology; Germany

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- 8 **Numerical Study Of Liquid Jet Break Up Discharging From A Circular Orifice**  
A. Sarrestehdari, et. al.  
Shahrood University of Technology; Iran

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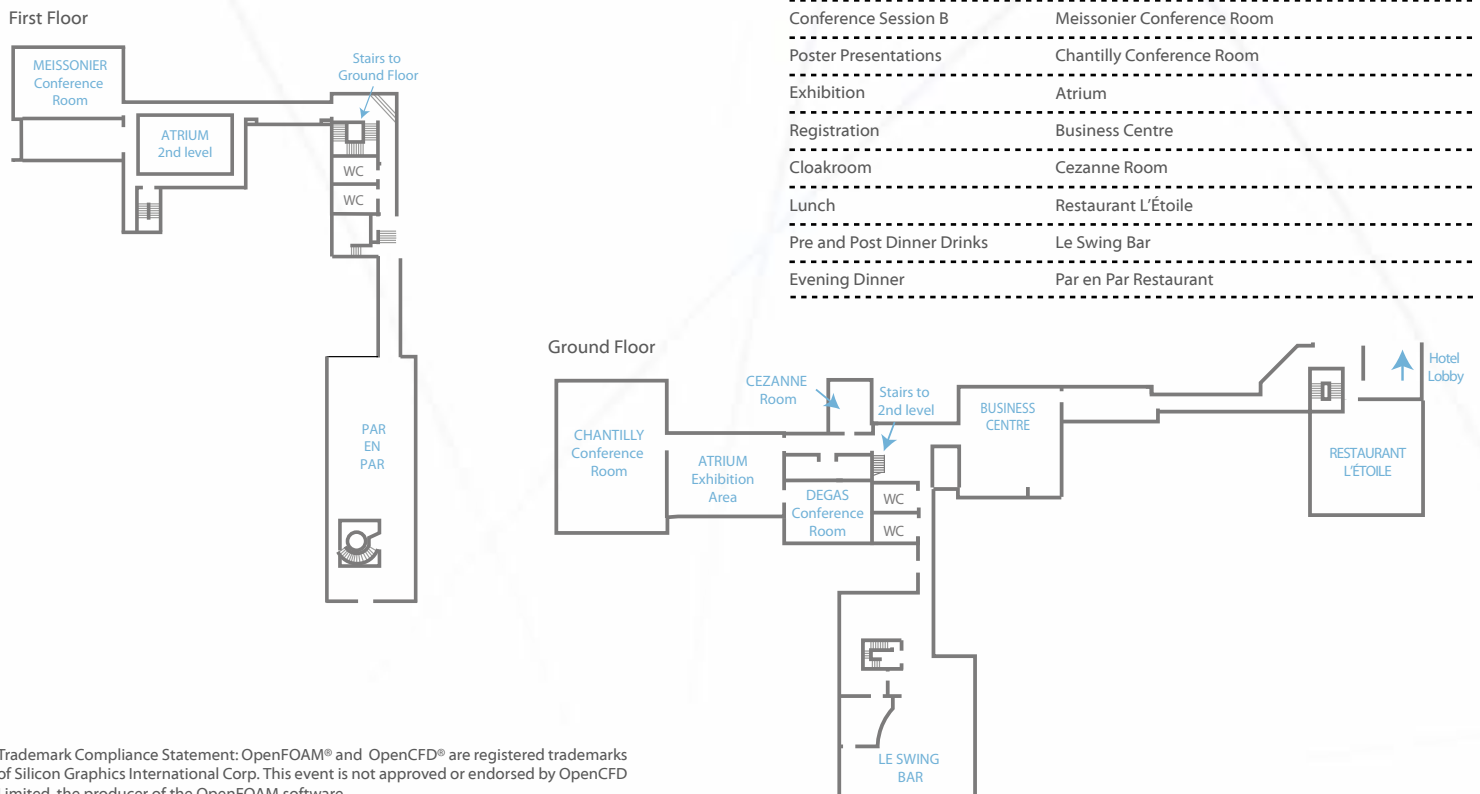
- 9 **Investigation Of Kármán Vortices In The Viscoelastic Flow Behind A Cylinder**  
A. Sarrestehdari, et. al.  
Shahrood University of Technology; Iran

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- 10 **Design Optimization Of Winglet Tubes By CFD Simulations**  
R. Stauch, et. al.  
Behr GmbH & Co. KG; Germany

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### Floor Plan



### Events

### Location

Conference Session A	Chantilly Conference Room
Conference Session B	Meissonier Conference Room
Poster Presentations	Chantilly Conference Room
Exhibition	Atrium
Registration	Business Centre
Cloakroom	Cezanne Room
Lunch	Restaurant L'Étoile
Pre and Post Dinner Drinks	Le Swing Bar
Evening Dinner	Par en Par Restaurant