

Graduate Students, Academia Researchers, Industry & Government Practicing Engineers, Project Managers and Experts

**We are pleased to invite you to attend**

# CFD **IMPACT** 2016 CONFERENCE



## Israel **M**ultidisciplinary **P**arallel **A**dvanced **C**omputational **T**urbulence **Program | June 28, 2016**

D. Dan and Betty Kahn Faculty of Mechanical Engineering Building  
Technion - Israel Institute of Technology

08:15-09:00	<b>Gathering and Refreshments</b>
09:00-10:00	<b>Opening Session</b>
09:00-09:10	Opening Remarks
09:10-10:00	Keynote Lecture  <i><b>Parallel High-Order Finite-Volume Methods with Adaptive Mesh Refinement for Physically-Complex Flows</b></i> <b>Clinton Groth</b> , Institute for Aerospace Studies, University of Toronto, Ontario, Canada
10:00-10:20	<b>Coffee Break</b>
10:20-11:50	<b>1<sup>st</sup> Session - High-Order Numerical Methods and LES Applications</b>
10:20-10:50	<i><b>High Fidelity Large Eddy Simulation of Rotorcraft Aerodynamics using a Multiblock Immersed Boundary Method</b></i> <b>Yann Delorme</b> , Faculty of Mechanical Engineering, Technion, Israel
10:50-11:20	<i><b>Development and Application of a High-Order Flux Reconstruction Compressible Navier-Stokes Solver on Unstructured Grids</b></i> <b>Kunal Puri</b> , Faculty of Mechanical Engineering, Technion, Israel
11:20-11:50	<i><b>Roll Torque Prediction in Solid Rocket Motors using High-Order Finite-Volume Numerical Scheme</b></i> <b>Hod Wirzberger, Oren Peles</b> , IMI SYSTEMS, Israel and <b>Eli Turkel</b> , School of Mathematics, Tel-Aviv University, Israel
11:50-12:10	<b>Coffee Break</b>
12:10-13:40	<b>2<sup>nd</sup> Session - LES applications, Hybrid RANS/LES, and Multiphase Flow</b>
12:10-12:40	<i><b>Aero-Optic Predictions at Transonic Flow Using Compressible Large Eddies Simulations</b></i> <b>Eran Arad and Mickey Weidenfeld</b> , Rafael, Israel
12:40-13:10	<i><b>A New Hybrid RANS/LES Method Applied to Turbulent Channel Flow</b></i> <b>Zvi Hantsis</b> , Faculty of Mechanical Engineering, Technion, Israel
13:10-13:40	<i><b>On The Application of A High-Order Positivity-Preserving Limiter for Compressible Multicomponent and Multiphase Flow</b></i> <b>Ory Haimovich</b> , Faculty of Mechanical Engineering, Technion, Israel
13:40-14:30	<b>Lunch Break</b>
14:30-16:00	<b>3<sup>rd</sup> Session - High-Performance Computing and CFD</b>
14:30-15:00	<i><b>Introduction to High-Performance Parallel Computing Technologies</b></i> <b>Mark Silberstein</b> , Faculty of Electrical Engineering, Technion, Israel
15:00-15:30	<i><b>Collaborating CPU and GPU for Large-Scale High-Order Cfd Simulations with Complex Grids on the Tianhe-1A Supercomputer</b></i> <b>Chuanfu Xu</b> , Computer College, National University of Defense Technology, Changsha, China and <b>Yonggang Che</b> , Science and Technology on Parallel and Distributed Processing Laboratory, National University of Defense Technology, Changsha, China
15:30-16:00	<i><b>Scaling a Combustion Simulation Application to the Tianhe-2 Supercomputer</b></i> <b>Yonggang Che</b> , Science and Technology on Parallel and Distributed Processing Laboratory, National University of Defense Technology, Changsha, China and <b>Chuanfu XU</b> , Computer College, National University of Defense Technology, Changsha, China
16:00-16:30	<b>Final Remarks, Discussions, Tour of new Computational Teaching Lab, Adjourn</b>

Participation is free but requires registration!

**Only 50 seats are available !**

**Register now to secure your seat!**

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