

Monday May 17, 2010

6:00 PM - 9:00 PM	Registration and Welcome Reception: Grad Club, Middlesex College
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Tuesday May 18, 2010 (AM)

8:00 AM - 4:00 PM	Conference Registration: Main Foyer, Social Science Center
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8:30 AM - 9:30 AM	Plenary Session (Room SSC2050): Error Estimation and Adaptive Mesh Refinement in Complex Geometry Problems (Marian Nemeč)
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9:30 AM - 10:00 AM	Coffee Break: Sponsored by Bombardier Aerospace
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	Session A-1 (Algorithms I)	Session B-1 (Heat Transfer)	Session C-1 (Applications I)	Session D-1 (Turbomachinery/Aerodynamics)
	Room SSC 2032	Room SSC 2036	Room SSC 2110	Room SSC 3018
	Session Chair: Ron Barron	Session Chair: Patrick Oosthuizen	Session Chair: Gary Rankin	Session Chair: Catherine Mavriplis
10:00 AM - 10:20 AM	Flood Wave Dynamics Using Lagrangian Block Advection <i>L. Tan and V.H. Chu</i> Department of Civil Engineering and Applied Mechanics, McGill University	A Numerical Study of Laminar and Turbulent Mixed Natural and Forced Convective Flow over a Vertical Plate with a Uniform Surface Heat <i>P.H. Oosthuizen and J.T. Paul</i> Department of Mechanical and Materials Engineering, Queen's University	Numerical Investigation of Hydrogen dispersion into Air <i>R. Khaksarfard and M. Paraschivoiu</i> Department of Mechanical and Industrial Engineering, Concordia University	Computation of High-pressure Turbine Cascade Flow with Upstream Blocks of Isotropic Turbulence <i>X. Wu, L.T. Li, and M. St. Hilaire</i> Department of Mechanical Engineering, Royal Military College of Canada
10:20 AM - 10:40 AM	Dynamic Grid Generation Using a Perturbed Elliptic System <i>A. Shadpour¹ and R.M. Barron^{1,2}</i> ¹ Department of Mechanical, Automotive, and Materials Engineering and ² Department of Mathematics and Statistics, University of Windsor	A Numerical Study of the Effect of Prandtl Number on Transitional and Turbulent Natural Convective Heat Transfer from a Vertical Plate with a Uniform Surface Heat Flux <i>P.H. Oosthuizen</i> Department of Mechanical and Materials Engineering, Queen's University	CFD Simulation of Heat Transfer and Fluid Flow in Yokohama Atrium <i>A. Kitagawa¹, M. Lightstone¹, P.H. Oosthuizen²</i> ¹ Department of Mechanical Engineering, McMaster University and ² Department of Mechanical and Materials Engineering, Queen's University	Numerical Simulation in the Runner of a Propeller Turbine - Tip Leakage Flow and Blade Tip Vortex <i>E.R. Ortiz, J.M. Gagnon, and C. Deshênes</i> Department of Mechanical Engineering, Laval University
10:40 AM - 11:00 AM	Efficient Over-Determined Implementation of the Immersed Boundary Conditions Method <i>S.Z. Husain¹ and J.M. Floryan²</i> ¹ Meteorological Research Division, Environment Canada and ² Department of Mechanical and Materials Engineering, University of Western Ontario	Roll Instability of a Stationary Fluid exposed to Spatially Distributed Thermal Forcing <i>M.Z. Hossain and J.M. Floryan</i> Department of Mechanical and Materials Engineering, University of Western Ontario	An Evaluation of Turbulence Models for the Numerical Study of Flow and Temperature Distributions in Atria <i>S. Hussain and P.H. Oosthuizen</i> Department of Mechanical and Materials Engineering, Queen's University	Numerical Simulation of Turbulent Airflow through the Inlet Diffuser of Ramjet Engine <i>M. Akbarzadeh¹, M.J. Kermani², and Y. Daghighi³</i> ¹ Department of Mechanical Engineering, University of Manitoba, ² Department of Mechanical Engineering, Amirkabir University of Technology, and ³ Department of Mechanical and Mechatronics Engineering, University of Waterloo
11:00 AM - 11:20 AM	A Fourth-Order, Low-Dispersion, and Low-Dissipation Implicit Runge-Kutta Scheme <i>A. Najafi-Yazdi and L. Mongeau</i> Department of Mechanical Engineering, McGill University	Study of Single, Axisymmetric Micro Jet-Impingement Cooling <i>K. Anand and B.A. Jubran</i> Department of Aerospace Engineering, Ryerson University	Modeling and Experiment of Impacts of UV Lamp Surface Temperature by Water Temperature in UV Water Disinfection <i>L.M. Zhang¹, Q. Guo², and J. Yang^{1,2}</i> ¹ Department of Mechanical and Materials Engineering and ² Department of Biomedical Engineering, University of Western Ontario	Numerical Analysis of a Flexible Flapping Airfoil with Large Displacements <i>J-F. Cori, S. Etienne, and D. Pelletier</i> Département de Génie Mécanique, École Polytechnique

<p>11:20 AM - 11:40 AM</p>	<p>Superconvergent Functional Estimates and Summation-By-Parts Finite-Difference Methods <i>J.E. Hicken and D.W. Zingg</i> Institute for Aerospace Studies, University of Toronto</p>	<p>CFD Study of Convective Cooling of a Cylinder using a Perforated Helical Coil <i>M. Farrokhnejad, A.G. Straatman, and J.T. Wood</i> Department of Mechanical and Materials Engineering, University of Western Ontario</p>	<p>Towards a Computational Study of the Water Cycle at the Surface of Mars <i>J.T. Zubik, J.A. Davis, and C.F. Lange</i> Department of Mechanical Engineering, University of Alberta</p>	<p>Numerical Study of Crosswind Effects on Aerodynamic Performance of a Pickup Truck <i>Z. Peng and X. Nie</i> Mechanical, Automotive, and Materials Engineering, University of Windsor</p>
<p>11:40 AM - 12:00 PM</p>	<p>Integration of a Recoloring Algorithm into a Rothman-Keller Lattice Boltzmann Model <i>S. Leclaire, M. Reggio, and J-Y. Trépanier</i> Department of Mechanical Engineering, École Polytechnique</p>	<p>On the Comparison Between Low-order and Amplitude-equation Approaches in Thermal Convection <i>B. Albaalbaki and R.E. Khayat</i> Department of Mechanical and Materials Engineering, University of Western Ontario</p>	<p>Induced Wall and Ground Effects by a Ducted Fan Used for VTOL Applications in Confined 3D Environments <i>Z. Hosseini, R.J. Martinuzzi, A. Ramirez-Serrano</i> Department of Mechanical and Manufacturing Engineering, University of Calgary</p>	

<p>12:00 PM - 1:30 PM</p>	<p>Annual General Meeting CFD Society of Canada and Lunch (Great Hall)</p>
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Tuesday May 18, 2010 (PM)

	Session A-2 (Algorithms II)	Session B-2 (Turbulence modeling)	Session C-2 (Applications II)	Session D-2 (Micro and Nano Systems)
	Room SSC 2032	Room SSC 2036	Room SSC 2110	Room SSC 3018
	Session Chair: Clinton Groth	Session Chair: Ugo Piomelli	Session Chair: Marilyn Lightstone	Session Chair: Jun Yang
1:30 PM - 1:50 PM	A Parallel Solution Adaptive Method for Radiative Heat Transfer Using a Newton-Krylov Approach <i>M.R.J Charest, C.P.T. Groth, and Ö.L. Gülder</i> <i>Institute for Aerospace Studies, University of Toronto</i>	Direct Numerical Simulation of Boundary Layers Subjected to Freestream Acceleration <i>U. Piomelli and V. Grazioso</i> <i>Department of Mechanical and Materials Engineering, Queen's University</i>	Computational Fluid Dynamics Study of a Vertical Inlet Solar Domestic Hot Water Tank System <i>D.J. Nizami¹, M.F. Lightstone¹, S.J. Harrison², and C.A. Cruickshank³</i> ¹ Department of Mechanical Engineering, McMaster University, ² Department of Mechanical and Materials Engineering, Queen's University, and ³ Department of Mechanical and Aerospace Engineering, Carleton University	Analysis of Three-dimensional Heat Transfer in Single- and Two-Layered Circular Micro-Channel Heat Sinks <i>A.M.F. El-Shaboury, H.M. Soliman, and S.J. Ormiston</i> <i>Department of Mechanical and Manufacturing Engineering, University of Manitoba</i>
1:50 PM - 2:10 PM	Assessment of Parallel Performance of a 3D Unstructured CFD Solver on Linux Cluster with Multi-Core Processors <i>H. Yang</i> <i>Institute for Aerospace Research, National Research Council</i>	Direct Numerical Simulations of Turbulent Flow in Square and Skewed Ducts <i>H. Raiesi, A. Pollard, and U. Piomelli</i> <i>Department of Mechanical and Materials Engineering, Queen's University</i>	Simulation of ZnO Reduction Reaction in a Solar Reactor <i>F. Khan and K. Siddiqui</i> <i>Department of Mechanical and Materials Engineering, University of Western Ontario</i>	Investigation of Fluid and Particle Flows in a Micropropulsion System <i>T. Morris, M. Forget, and M. Jugroot</i> <i>Department of Mechanical Engineering, Royal Military College of Canada</i>
2:10 PM - 2:30 PM	Spectrally Accurate Method for Analysis of Flows in Annuli Bounded by Corrugated Walls <i>H.V. Moradi and J.M. Floryan</i> <i>Department of Mechanical and Materials Engineering, University of Western Ontario</i>	DNS of Particle Motion and Deposition in a Small Room <i>X. Jia¹, J. Derksen^{1,2}, G. Ahmadi³, J.B. McLaughlin¹</i> ¹ Department of Chemical and Biomolecular Engineering, Clarkson University, ² Department of Chemical Engineering, University of Alberta, ³ Department of Mechanical and Aeronautical Engineering, Clarkson University	CFD Simulation in Ultraviolet Water Disinfection Systems: Effects of Multiple Reflections and Refractions Occur at Interfaces <i>L.M. Zhang¹, P.R. Spencer¹, Q. Guo², and J. Yang^{1,2}</i> ¹ Department of Mechanical and Materials Engineering and ² Department of Biomedical Engineering, University of Western Ontario	Lattice Boltzmann Simulations of Red Blood Cell Dynamics in Microvessels <i>W. Xiong and J. Zhang</i> <i>School of Engineering, Laurentian University</i>
2:30 PM - 2:50 PM	High Order Methods Comparisons <i>C. Mavriplis</i> <i>Department of Mechanical Engineering, University of Ottawa</i>	Coherent Structures in the Flow Over Two-dimensional Dunes <i>M. Omidyeganeh and U. Piomelli</i> <i>Department of Mechanical and Materials Engineering, Queen's University</i>	CFD Modeling of Moisture Transfer in a Porous Media <i>C. Fischer and A.G. Straatman</i> <i>Department of Mechanical and Materials Engineering, University of Western Ontario</i>	Application of the Lattice Boltzmann Method to Calculate Natural Convection of Nanofluids in a Shallow Cavity <i>J. Guet, M. Reggio, P. Vasseur, and S. Leclaire</i> <i>Ecole Polytechnique</i>
2:50 PM - 3:10 PM	Parallel Graph Analysis and Adaptive Meshing using Graphics Processing Units <i>T. McGuinness and J.B. Perot</i> <i>Department of Mechanical and Industrial Engineering, University of Massachusetts</i>	Grid Requirements for Large-eddy Simulations of Passive Scalar Transport at High Prandtl Numbers <i>C. Scalo and U. Piomelli</i> <i>Department of Mechanical and Materials Engineering, Queen's University</i>	Turbulent Flow and Heat Transfer in a 2-D Duct Filling with Porous Material <i>H. Jafari and M.H. Rahimian</i> <i>Department of Mechanical Engineering, University of Tehran, Iran</i>	Meso-Level Modeling of Nanoscale Water Battery <i>Y. Liu¹, Q. Guo², and J. Yang^{1,2}</i> ¹ Department of Mechanical and Materials Engineering and ² Department of Biomedical Engineering, University of Western Ontario
3:10 PM - 3:30 PM	Coffee Break: Sponsored by Rolls-Royce Canada			

	Session A-3 (Algorithms III)	Session B-3 (Bluff Bodies)	Session C-3 (Combustion I)	Session D-3 (Non-Newtonian and other flows)
	Room SSC 2032	Room SSC 2036	Room SSC 2110	Room SSC 3018
	Session Chair: Evgeny Timofeev	Session Chair: Donald Bergstrom	Session Chair: Carlos Lange	Session Chair: Jason Lassaline
3:30 PM - 3:50 PM	A Parallel Multi-block Newton-Krylov Flow Solver for the Navier-Stokes Equations with SBP-SAT Discretization <i>M. Osusky and D.W. Zingg Institute for Aerospace Studies, University of Toronto</i>	Use of Proper Orthogonal Decomposition to Investigate the Large-Scale Dynamics in the Wake Region of an Infinite Square Cylinder <i>M.E. Samani, M. Einian, D.J. Bergstrom Department of Mechanical Engineering, University of Saskatchewan</i>	Appropriate Techniques for Simulation of Shock-Induced Ignition <i>J. Melguizo-Gavilanes, N. Rezaeyan, L. Bauwens Department of Mechanical and Manufacturing Engineering, University of Calgary</i>	Effects of Inertial Loading on Blood Flow in the Aortic Arch <i>J. Zalger and J.V. Lassaline Department of Aerospace Engineering, Ryerson University</i>
3:50 PM - 4:10 PM	Adaptive Cubed-sphere Simulation Framework for Space Physics Flows <i>L. Ivan¹, S. Northrup², C.P.T. Groth², H. De Sterck¹ ¹Department of Applied Mathematics, University of Waterloo and ²Institute for Aerospace Studies, University of Toronto</i>	Development of Streamwise Vortex Structure in the Wake of a Finite Surface Mounted Square Cylinder <i>J.A. Bourgeois, P. Sattari, and R.J. Martinuzzi Department of Mechanical and Manufacturing Engineering, University of Calgary</i>	Numerical Studies on HCCI Engine Combustion <i>S. Jonnalagedda, A.-T. Nguyen, B. Zhou, and A. Sobiesiak Department of Mechanical, Automotive, and Materials Engineering, University of Windsor</i>	Stability of Shear Flow of Viscous Electrically Conducting Fluid in the Presence of Velocity and Magnetic Shears <i>P.M. Balagondar¹ and A.R. Vijayalakshmi² ¹Department of Mathematics, Bangalore University and ²Department of Mathematics, Maharani Science College for Women</i>
4:10 PM - 4:30 PM	A Hybrid Explicit-Implicit Second Order TVD Scheme: Linear Advection Equation Case <i>F. Norouzi and E. Timofeev Department of Mechanical Engineering, McGill University</i>	Free Surface Flow Past a Cylinder Under Rotary Oscillations: Part 1. Locked-on Vortex Shedding Modes <i>E. Liverman, C. Bozkaya, and S. Kocabiyik Department of Mathematics and Statistics, Memorial University of Newfoundland</i>	Soot Formation in High-pressure Laminar Methane Diffusion Flames <i>M.R.J. Charest, C.P.T. Groth, and Ö.L. Gülder Institute for Aerospace Studies, University of Toronto</i>	Spectrally-Accurate Method for Analysis of Ellis Fluid in a channel with Arbitrary Roughness <i>M.F. Bakhsheshi, J.M. Floryan, and P.N. Kaloni Department of Mechanical and Materials Engineering, University of Western Ontario</i>
4:30 PM - 4:50 PM	A Semi-Implicit CBS Finite Volume Algorithm for the Solution of Incompressible Flow Problems <i>M. Nickaen and A. Ashrafizadeh Faculty of Mechanical Engineering, Toosi University of Technology</i>	Free Surface Flow Past a Cylinder Under Rotary Oscillations: Part 2. Evaluation of Fluid Forces and Pressure Field <i>C. Bozkaya, E. Liverman, and S. Kocabiyik Department of Mathematics and Statistics, Memorial University of Newfoundland</i>	A Numerical Approach to Develop Linear Control Models of NOx and Soot Emissions in a Direct Injection Diesel Engine <i>D. Wang and C. Zhang Department of Mechanical and Materials Engineering, University of Western Ontario</i>	
7:00 PM - 9:30 PM	Banquet: Great Hall, Somerville House			

Wednesday May 19, 2010 (AM)

8:00 AM - 4:00 PM	Conference Registration: Main Foyer, Social Science Center
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8:30 AM - 9:30 AM	Plenary Session (RoomSSC 2050): Flow in the Upper Human Airway - A Kaleidoscope of Flow Physics (Andrew Pollard)
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9:30 AM - 10:00 AM	Coffee Break: Sponsored by Research Western
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	Session A-4 (Multiphase Flows)	Session B-4 (Aero Design)	Session C-4 (Thin Film/Free Surface Flows)	Session D-4 (Wind Engineering)
	Room SSC 2032	Room SSC 2036	Room SSC 2110	Room SSC 3018
	Session Chair: Chao Zhang	Session Chair: David Zingg	Session Chair: Vincent Chu	Session Chair: Tony Straatman
10:00 AM - 10:20 AM	<p>Comparison of Air-Knives with Multiple-Impinging Slot Jets <i>P. Tamadonfar¹, A.N. Hrymak², J.R. McDermid¹, and F.E. Goodwin³</i></p> <p>¹Department of Mechanical Engineering, McMaster University, ²Department of Chemical and Biochemical Engineering, University of Western Ontario, and ³International Zinc Association</p>	<p>Wing Design for Range Maximization Using Aerodynamic Shape Optimization <i>T.M. Leung and D.W. Zingg</i> Institute for Aerospace Studies, University of Toronto</p>	<p>Numerical Modeling of Runback Flow on Surfaces with Various Wettabilities <i>X. Hu, G. Amini, and A. Dolatabadi</i> Department of Mechanical and Industrial Engineering, Concordia University</p>	<p>Preliminary Numerical Simulation of Straight and Axisymmetric Flows in WindEEE Dome Facility <i>D. Natarajan and H. Hangan</i> Boundary Layer Wind Tunnel Laboratory, University of Western Ontario</p>
10:20 AM - 10:40 AM	<p>Numerical Study on the Approach to Improve the Uniformity of the Radial Solids Distribution in CFB Risers by Changing Inlet Air Jets Arrangements <i>B. Peng¹, C. Zhang¹, and J. Zhu²</i></p> <p>¹Department of Mechanical and Materials Engineering and ²Department of Chemical and Biochemical Engineering, University of Western Ontario</p>	<p>Lateral-Directional Stability Investigation of a Blended-Wing-Body <i>P.F. Roysdon and M. Khalid</i> Department of Aeronautics and Aerospace, Von Karman Institute for Fluid Dynamics</p>	<p>Upstream Flow Near Channel Exit For Free-Surface Jet <i>M.Y. Hussain and R.E. Khayat</i> Department of Mechanical and Materials Engineering, University of Western Ontario</p>	<p>Energy and Exergy CFD Predictions for a Savonius Vertical Axis Wind Turbine <i>K. Pope, G.F. Naterer, and I. Dincer</i> Faculty of Engineering and Applied Science, University of Ontario Institute of Technology</p>
10:40 AM - 11:00 AM	<p>CFD Simulation on the Use of Shapeless Internals to Improve the Uniformity of Radial Solids Concentration Profile in CFB Risers <i>B. Peng¹, C. Zhang¹, and J. Zhu²</i></p> <p>¹Department of Mechanical and Materials Engineering and ²Department of Chemical and Biochemical Engineering, University of Western Ontario</p>	<p>Preliminary Aerodynamic Shape Optimization of a Blended-Wing-Body Aircraft Configuration <i>N.B. Kuntawala and D.W. Zingg</i> Institute for Aerospace Studies, University of Toronto</p>	<p>A Simple Finite-Volume Method for Modeling Wetting-Drying Transitions Over Complex Topographies <i>Z. Jean-Marie and A. Soulaïmani</i> Department of Mechanical Engineering, Ecole de Technologie Supérieure</p>	<p>Application of CFD Modeling for Wind Mapping in Complex Topographies <i>A. Rasouli and H. Hangan</i> Boundary Layer Wind Tunnel Laboratory, University of Western Ontario</p>
11:00 AM - 11:20 AM	<p>Simulation of Particle Deposition in an Impinging Jet Using EIM <i>E. Alatawi and E. Matida</i> Department of Mechanical and Aerospace Engineering, Carleton University</p>	<p>Development of an Industrial Aerodynamic Shape Optimization Strategy Using a Discrete Adjoint Method <i>K. Sermeus¹, K. Mohamed¹, and E. Laurendeau¹, and S. Nadarajah²</i></p> <p>¹Bombardier Aerospace and ²Department of Mechanical Engineering, McGill University</p>	<p>A Spectral Approach to Thin Newtonian Jet <i>M. Ahmed and R.E. Khayat</i> Department of Mechanical and Materials Engineering, University of Western Ontario</p>	<p>Numerical Simulation of the Dynamic Stall of a Wind Turbine Airfoil <i>D. Ramdenee, I.S. Minea, T.T. D'Hammonville, and A. Ilinca</i> Wind Research Laboratory, Université du Québec à Rimouski</p>

<p>11:20 AM - 11:40 AM</p>	<p>Numerical Simulation of Electrolytic Spray Impinging with Volume-Of-Fluid Model <i>Z. Peng, K. Su, P. Zhang, and X. Nie</i> <i>Mechanical, Automotive, and Materials Engineering, University of Windsor</i></p>	<p>Practical Aspects of Multipoint Aerodynamic Shape Optimization <i>H.P. Buckley and D.W. Zingg</i> <i>Institute for Aerospace Studies, University of Toronto</i></p>	<p>A Semi Numerical Approach to a Wall Jet Flow Near Singularity <i>M.A.K. Azad and R.E. Khayat</i> <i>Department of Mechanical and Materials Engineering, University of Western Ontario</i></p>	<p>Modeling Turbulence in the Atmospheric Boundary Layer <i>S. Li</i> <i>Boundary Layer Wind Tunnel Laboratory, University of Western Ontario</i></p>
<p>11:40 AM - 12:00 PM</p>	<p>Radiation and Convection Heat transfer of a Moving and Deforming Droplet in Uniform Flow <i>M.H. Rahimian¹ and A. Jalalian²</i> <i>¹Department of Mechanical Engineering, University of Tehran and ²Department of Energy Engineering, Power and Water University of Technology</i></p>	<p>Three-Dimensional Aerodynamic Shape Optimization Using a Newton-Krylov Discrete-Adjoint Algorithm <i>L.M. Olague and D.W. Zingg</i> <i>Institute for Aerospace Studies, University of Toronto</i></p>	<p>A Semi Numerical Approach for Moving Wall Jet Near Singularity <i>R. Amin and R.E. Khayat</i> <i>Department of Mechanical and Materials Engineering, University of Western Ontario</i></p>	<p>WRF Mesoscale Simulation of the Manitoba Hydro September 1996 Storm <i>Z. Boutanios and H. Hangan</i> <i>Boundary Layer Wind Tunnel Laboratory, University of Western Ontario</i></p>
<p>12:20 PM - 1:40 PM</p>	<p>Lunch: Elgin Hall</p>			

Wednesday May 19, 2010 (PM)

	Session A-5 (Combustion II)	Session B-5 (Algorithms IV)	Workshop on Energy and Environment
	Room SSC 2032	Room SSC 2036	Room SSC 2110 and Lab Tours
	Session Chair: Pierre Gauthier	Session Chair: Ali Ashrafizadeh	
1:40 PM - 2:00 PM	<p>Tabulated Chemistry Techniques: Comparison of Flame Prolongation of ILDM and Laminar Flamelet Methods for Laminar Flames <i>P.K. Jha and C.P.T. Groth</i> <i>Institute for Aerospace Studies, University of Toronto</i></p>	<p>A Finite-Volume Model for Flow in Conjugate Fluid-Porous Domains with Moving Grids <i>C.T. DeGroot and A.G. Straatman</i> <i>Department of Mechanical and Materials Engineering, University of Western Ontario</i></p>	
2:00 PM - 2:20 PM	<p>Numerical Investigation of the Non-Premixed Flame Structure in a Mesoscale Channel <i>M.A.G. Contreras¹, Y. Ju², and H.D. Ng¹</i> ¹<i>Department of Mechanical and Industrial Engineering, Concordia University and</i> ²<i>Department of Mechanical and Aerospace Engineering, Princeton University</i></p>	<p>Flow in a Channel with Grooved Walls <i>A. Mohammadi and J.M. Floryan</i> <i>Department of Mechanical and Materials Engineering, University of Western Ontario</i></p>	
2:20 PM - 2:40 PM	<p>LES of a Turbulent Premixed Bunsen Flame: Comparison of the FSD, PCM-FPI and Thickened Flame Models <i>F.E. Hernández-Pérez, C.P.T. Groth, and Ö.L. Gülder</i> <i>Institute for Aerospace Studies, University of Toronto</i></p>	<p>Optimization of CFD Systems with Variable Geometric and Control Parameters <i>D. Brown¹, C. Zhang¹, and J. Jiang²</i> ¹<i>Department of Mechanical and Materials Engineering and</i> ²<i>Department of Electrical and Computer Engineering, University of Western Ontario</i></p>	
2:40 PM - 3:00 PM	<p>CFD Predictions Emission Trends in Industrial Gas Turbine Combustors <i>P.Q. Gauthier¹, S. Jella¹, and M. Paraschivoiu²</i> ¹<i>Rolls-Royce Canada and</i> ²<i>Concordia University</i></p>	<p>An Arbitrary Lagrangian-Eulerian mesh movement scheme for long-term in-flight ice accretion <i>M. Fossati, R.A. Khurram and W.G. Habashi</i> <i>Department of Mechanical Engineering, McGill University</i></p>	
3:00 PM - 3:20 PM	<p>Parallel Implicit AMR Scheme for Unsteady Reactive Flows <i>S.A. Northrup and C.P.T. Groth</i> <i>Institute for Aerospace Studies, University of Toronto</i></p>	<p>The Effect of Finite Shock Front Thickness on the Transition from Regular to Mach Reflection on a Circular Cylinder <i>A. Hakkaki-Fard and E. Timofeev</i> <i>Department of Mechanical Engineering, McGill University</i></p>	