

CALL FOR PAPERS

CFD2018

The 26th Annual Conference of the Computational Fluid Dynamics
Society of Canada

Winnipeg, Manitoba, Canada
June 10 – 12, 2018

Email: CFD2018@Umanitoba.Ca

Website: <http://umanitoba.ca/engineering/conferences/CFD2018/>

Scope of the Conference

Rapid advances in computing technology have made CFD an increasingly important tool for predicting and analyzing fluid flow and heat and mass transfer, with applications to mechanical, aerospace, civil, and chemical engineering. CFD is also an important research tool in water resources, oceanography, atmospheric environment, and boundary-layer meteorology. CFD2018 features the following two themes:

Theme I: Computational Fluid Dynamics and Numerical Heat Transfer (oriented towards engineering flows);

Theme II: Computational Environmental Flows and Transport Phenomena (oriented towards environmental flows: water resources and atmospheric sciences).

Contributions from all sectors are solicited, across the full spectrum of CFD research and applications including, but not restricted to:

Theme I:

- Aerodynamics and Aeroacoustics
- Automotive Engineering
- Algorithms
- Bio-fluid Mechanics
- CFD Education
- Chemical Reacting Flows and Combustion
- Fluid-Structure Interactions
- Heat and Mass Transfer
- Industrial Applications
- Mesh Generation
- Multi-phase Flows
- Porous Media
- Non-Newtonian Flows
- Turbulence and Turbulence Modeling

Theme II:

- Atmospheric Environment and Sciences
- Boundary-layer Meteorology
- Environmental Flow
- Environmental Transport Phenomena
- Hydraulics
- Hydrology and Water Resources
- Oceanography
- Wind Engineering

Journal Special Issues

Corresponding to the two themes, selected papers will be invited for publication in special issues with the following two journals:

- (1) *International Journal of Numerical Methods for Heat & Fluid Flow*
<http://www.emeraldinsight.com/journal/hff>
- (2) *Physics and Chemistry of the Earth*
<https://www.journals.elsevier.com/physics-and-chemistry-of-the-earth>

Keynote Speakers

- [Prof. Gretar Tryggvason](#) (Charles A. Miller Jr. Distinguished Professor, Editorial board member for Int. J. Multiphase Flow, and former Editor-in-Chief for J. Computational Physics, FAPS, FASME and FAAAS, Johns Hopkins Univ., Maryland, USA);
- [Prof. Ugo Piomelli](#) (Canada Research Chair, Editor-in-Chief for J. Turbulence, FAPS, FASME, FAIAA and FRSC, Queen's Univ., Kingston, Canada);
- [Prof. Kemo Hanjalić](#) (Editorial board member and former Editor-in-Chief for Flow Turbulence and Combustion, FEng, FIAS, FInstP, FASME and FICHMT, Delft Univ. of Technology, Delft, The Netherlands and Novosibirsk State Univ., Russia);
- [Prof. Olaf Kolditz](#) (Chair Professor of Helmholtz Centre for Environmental Research, Editor-in-Chief for Environmental Earth Sciences, and for Geothermal Energy, Technische Universität Dresden, Germany);
- [Prof. Roland Stull](#) (Director of Geophysical Disaster Computational Fluid Dynamics Center, former Associate Editor for J. Applied Meteorology, AMS Glossary of Meteorology, and Romanian J. Meteorology, Certified Consulting Meteorologist – USA, Certified Flight Instructor – USA, FAMS, Univ. of British Columbia, Vancouver, Canada).

Location

CFD2018 will be held in the Engineering and Information Technology Complex (EITC) at the University of Manitoba, in Winnipeg, Manitoba, Canada. Winnipeg is the geographical center of Canada, convenient to reach, and has direct flights to major cities in North America.

Accommodations

Arrangements have been made with several hotels to offer a special rate to delegates. On-campus accommodation will also be available at the University of Manitoba.

Abstract Submission

Papers will be accepted on the basis of reviewed extended abstracts. An extended abstract should be 3 pages in length, including figures, tables and references. **Deadline for submission of abstracts is February 15, 2018.** Abstract format must follow the template (Word or Latex) posted on the Conference website <http://umanitoba.ca/engineering/conferences/CFD2018/>

Language

The official language for CFD2018 will be English.

Deadlines

February 15, 2018: Abstract submission
March 15, 2018: Notification of abstract acceptance
May 15, 2018: Submission of final manuscript
May 15, 2018: Early registration ends

Organizing Committee

Dr. Bing-Chen Wang, Conference Chair
Dept. of Mechanical Engineering

Dr. Scott Ormiston, Conference Co-Chair (Theme I)
Dept. of Mechanical Engineering

Dr. Hartmut Hollaender, Conference Co-Chair (Theme II)
Dept. of Civil Engineering

Faculty of Engineering
E2-327 EITC Building
Univ. of Manitoba
Winnipeg, MB, Canada, R3T 5V6

Scientific Committee

Dr. Rabi Baliga (McGill University, Canada)
Dr. Ronald Barron (University of Windsor, Canada)
Dr. Donald Bergstrom (University of Saskatchewan, Canada)
Dr. Markus Bussmann (University of Toronto, Canada)
Dr. Nedjib Djilali (University of Victoria, Canada)
Dr. Karen Dow (University of Manitoba, Canada)
Dr. Morris Flynn (University of Alberta, Canada)
Dr. Thomas Graf (University of Hannover, Germany)
Dr. Clinton Groth (University of Toronto, Canada)
Dr. Greg Kopp (Western University, Canada)
Dr. David Kuhn (University of Manitoba, Canada)
Dr. Peter Lehmann (ETH Zurich, Switzerland)
Dr. Marilyn Lightstone (McMaster University, Canada)
Dr. Pooneh Maghoul (University of Manitoba, Canada)
Dr. Robert Martinuzzi (University of Calgary, Canada)
Dr. Mathieu Olivier (University of Laval, Canada)
Dr. Carl Ollivier-Gooch (University of British Columbia, Canada)
Dr. Patrick Oosthuizen (Queen's University, Canada)
Dr. Andrew Pollard (Queen's University, Canada)

Dr. Jasmin Raymond (INRS Quebec, Canada)
Dr. Douglas Ruth (University of Manitoba, Canada)
Dr. Hassan Soliman (University of Manitoba, Canada)
Dr. Tony Straatman (Western University, Canada)
Dr. Gordon Stublely (University of Waterloo, Canada)
Dr. Brian Vermeire (Concordia University, Canada)
Dr. Li Xi (McMaster University, Canada)
Dr. David Zingg (University of Toronto, Canada)

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