

**ICTAM 2016**  
MONTRÉAL

# 24<sup>th</sup> International Congress of Theoretical and Applied Mechanics

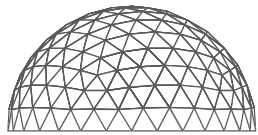
Palais des congrès, Montréal, Canada

August 21 – 26, 2016

## Call for Papers and Second Announcement



**IUTAM** International Union of Theoretical  
and Applied Mechanics  
Official IUTAM Congress



**ICTAM 2016**  
M O N T R É A L



**J.M. Floryan**  
*President, 24<sup>th</sup> ICTAM*

In February of 2015, the 24<sup>th</sup> International Congress of Theoretical and Applied Mechanics (ICTAM 2016) released the First Announcement and Call for Papers. Since that time, we have been working hard behind the scenes to build systems that will make your paper submission and review processes simple and efficient. The result of these efforts and more is now available online at [www.ICTAM2016.org](http://www.ICTAM2016.org).

With the program well-defined, we anticipate interesting and stimulating presentations by invited speakers as well as by colleagues in mechanics from around the world who are submitting their abstracts for oral and poster presentations. If you have not done so already, please visit the Program pages to see the full listing of Mini-Symposia and Thematic Sessions. Details on upcoming registration rates are also now available.

Congresses such as IUTAM 2016 cannot take place without partnerships, and we are indeed grateful for all the support we have received to date. We want to thank all the sponsors who have already confirmed their participation – Virginia Tech, the University of Toronto, the Canadian Congress of Applied Mechanics, the University of Waterloo and the Pacific Institute for the Mathematical Sciences – and encourage those considering such an opportunity to review our online prospectus, and contact us soon. As talks are already underway with several more partners, we expect to add more soon to our website.

Finally, we understand that arrangements outside the scientific program are also crucial to building a memorable Congress experience. Our website now provides a list of recommended hotels, with special Congress pricing, all within a short walk from the Congress Centre. While Montreal is an easy and safe city to navigate on your own, a tour program involving sightseeing before, during and after the Congress has been developed for both participant and those who accompany them to Montreal.

On behalf of the entire IUTAM Congress Committee, the Canadian National Advisory and Local Organizing Committees, I would once again like to extend our warmest invitation to join us in August 2016. We look forward to welcoming you to Montreal!



# Scientific Program

## Plenary Lectures

### Opening Lecture:

W. Richard Peltier (U. Toronto)

### Closing Lecture:

Norman A. Fleck (U. Cambridge)

### Prize Lectures:

**Batchelor Prize Lecture**  
**Hill Prize Lecture**

### Sectional Lecturers in Fluids:

Eberhard Bodenschatz, John Bush, Tim Colonius,  
Anette Hosoi, Javier Jimenez, Alex Smits

### Sectional Lecturers in Fluids-Solids:

Charbel Farhat, George Haller, Haiyan Hu

### Sectional Lecturers in Solids:

Basile Audoly, Daining Fang, Samuel Forest, Peter  
Hunter, Patrick Onck, John Rogers, Zhigang Suo

### Mini-Symposia:

#### Bypass Transition:

Bruno Eckhardt, Michael Graham

#### Fluid Active Matter:

Eric Lauga, Roman Stocker

#### Multiphase Flow in the Processing Industry:

Patrick Anderson, Staffan Lundström

#### Nonlinear Dynamics of Engineering Systems:

Dick van Campen, Giuseppe Rega

#### Soft Solid Active Matter:

Vikram Deshpande, Zhigang Suo

#### Topology Optimization:

Ole Sigmund, Fred van Keulen

## Thematic Sessions

### Fluids Topics

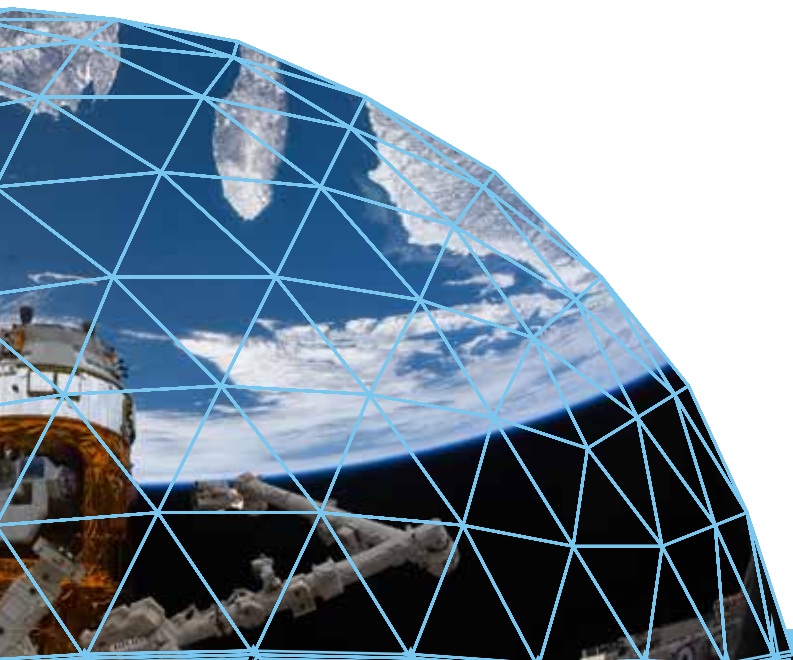
- FM01 Biological Fluid Mechanics
- FM02 Boundary Layers
- FM03 Combustion and Flames
- FM04 Compressible Flow
- FM05 Convection
- FM06 Drops, Bubbles and Multiphase Flows
- FM07 Flow Instability and Transition
- FM08 Flow in Thin Films
- FM09 Geophysical and Environmental Fluid Dynamics
- FM10 Low Reynolds Number Flow
- FM11 Micro- and Nano-fluidics
- FM12 Non-Newtonian and Complex Fluids
- FM13 Computational Fluid Dynamics
- FM14 Turbulence
- FM15 Vortex Dynamics
- FM16 Waves in Fluids
- FM17 Other Topics in Fluid Mechanics

### Solids Topics

- SM01 Biomechanics and Biomaterials
- SM02 Contact and Friction
- SM03 Damage Mechanics
- SM04 Elasticity
- SM05 Fracture Mechanics
- SM06 Geophysics and Geomechanics
- SM07 Impact Mechanics and Wave Propagation
- SM08 Multi-component Materials and Composites
- SM09 Phase and Chemical Transformations and Thermomechanical Phenomena
- SM10 Sizescale Effects in Materials
- SM11 Multibody and Vehicle Dynamics
- SM12 Nanostructures and MEMS
- SM13 Plasticity, Viscoplasticity and Creep
- SM14 Stability of Structures
- SM15 Computational Solid Mechanics
- SM16 Vibrations and Control of Structures
- SM17 Other Topics in Solid Mechanics

### Fluids/Solids Topics

- FS01 Acoustics
- FS02 Exascale Computing
- FS03 Experimental Methods in Mechanics
- FS04 Chaos and Pattern Formation
- FS05 Porous Media
- FS06 Fluid Structure Interactions
- FS07 Actuating and Smart Materials
- FS08 Granular Materials and Flows
- FS09 Foams and Cellular Materials
- FS10 Education in Mechanics



# Call for Papers

Canada is a bilingual country, speaking English and French. While services at this Congress are provided in both official languages, the Scientific Program component will be presented in English only.

Authors are invited to submit a paper in English to be considered for oral or poster presentation as part of either the Thematic Sessions or the Mini-Symposia at ICTAM 2016. The deadline for submission of papers is January 15<sup>th</sup>, 2016. Authors will be asked to submit papers using an online abstract submission link.

## Submission Period:

September 8<sup>th</sup>, 2015 – January 15<sup>th</sup>, 2016

## Language of Submission:

All papers must be submitted in English with accurate grammar and spelling suitable for publication.

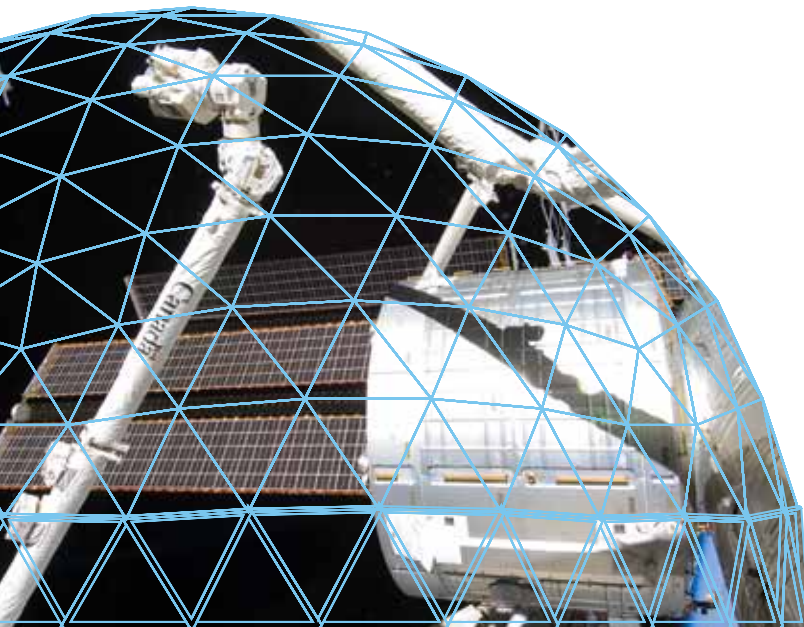
## Paper Submission Limit:

Generally, only one (1) paper submission per submitter will be permitted. The exception is that authors submitting to FS10, Education in Mechanics will also be permitted to submit one (1) other paper to another Thematic Session. Papers have a maximum length of two (2) pages.

## Presenting Author:

The same presenting author (oral or poster) cannot be assigned to more than one (1) paper but can be included as co-author on more than one submission.

Submission of a paper constitutes the commitment of at least one author to register for the Congress and present their work either orally or through a poster. Expenses associated with the preparation, submission and presentation of the paper are the responsibility of the author/presenter.



## Important Dates

<b>September 8, 2015:</b>	Call for Papers opens
<b>January 15, 2016:</b>	Deadline for Submission of Abstracts
<b>April 15, 2016:</b>	Notification of Acceptance
<b>May 6, 2016:</b>	Early Bird and Author Registration Deadline
<b>August 21, 2016:</b>	Congress Opens

You can receive the latest information on ICTAM 2016 by visiting the Congress website at [www.ICTAM2016.org](http://www.ICTAM2016.org). If you have questions, please do not hesitate to contact us at:

Tel: + 1 (613) 993-0414

Fax: + 1 (613) 993-7250

Email: [ICTAM2016@nrc-cnrc.gc.ca](mailto:ICTAM2016@nrc-cnrc.gc.ca)