



CALL FOR PAPERS

14th International Conference on Multibody Systems, Nonlinear Dynamics, and Control (MSNDC)

to be held in conjunction with the
ASME 2018 International Design Engineering
Technical Conferences
Quebec City Convention Center, Quebec City, Canada
August 26 - 29, 2018

The International Conference on Multibody Systems, Nonlinear Dynamics, and Control (MSNDC) is a premier meeting event for professional networking and research exchange across the multibody systems and nonlinear dynamics technical community. The conference facilitates the dissemination of fundamental research in the enabling disciplines as well as research into their application to engineered or naturally occurring mechanical systems across all length and time scales.

MSNDC is a forum that

1. recognizes MSND research that is current and original and has wide-ranging appeal,
2. recognizes nascent efforts to bring MSND methods to new areas of application,
3. promulgates the application-oriented integration of existing MSND results and methods,
4. raises the visibility of the research and promotes advances in MSND education, and
5. sustains the vitality of the multibody systems and nonlinear dynamics professional community.

Papers are welcome on each of the following topics:

- Nonlinear Energy Transfers and Harvesting
- Flexible Multibody Dynamics
- Contact and Interface Dynamics
- Nonlinear Dynamics of Structures
- Time-Varying and Time-Delay Systems
- Nonlinear Rotordynamics and Rotating Systems
- Optimization, Sensitivity Analysis, and Uncertainty Quantification in Dynamic Systems
- Applications in Biomechanics
- Modeling, Simulation, and Validation of Vehicle Dynamics
- Fluid-Structure Interaction and Multi-physics
- Computational Methods in Multibody Systems and Nonlinear Dynamics
- Analytical and Perturbation Methods
- Software Tools for Computational Dynamics
- Dynamics & Control of Robotic and Mechatronic Systems
- Efficient Methods and Real-Time Simulation
- Transfer Matrix Method for Multibody Systems and its Applications

All submissions with full-length papers are due by **Monday, March 12, 2018**. The full-length papers will be reviewed and accepted manuscripts will be published in the conference proceedings. We also accept presentation-only abstracts (2-page) that are not published in the proceedings. This has been particularly attractive to those who wanted to present early results of their research.

All full-length papers will automatically be considered for the Best Paper Award competitions. We will recognize two papers, one in Nonlinear Dynamics and one in Multibody Dynamics.

There will be a student paper competition for full-length papers. To be considered for it, the

paper-type during submission should be chosen as 'student paper'. The call for student paper competition along with the eligibility criteria is at <https://goo.gl/eti8Di> and are also listed in the MSNDC conference description on the ASME IDETC/CIE website. Funds are available to partially reimburse travel expenses of student attendees (submit the form: <https://goo.gl/5pTMOV>).

We will also host a keynote presentation by the recipient of the prestigious D'Alembert Award. MSNDC will feature two invited keynote lectures, by Prof. Brynjulf Owren from NTNU in Norway and Prof. Hiroaki Yoshimura from Waseda University in Japan.

The full publication schedule is available at: <http://www.asmeconferences.org/IDETC2018/PublicationSchedule.cfm>

The solicited paper types are described on: <http://www.asmeconferences.org/IDETC2018/PaperTypes.cfm>

The ASME IDETC conference website is: <https://www.asme.org/events/idetccie>

MSNDC Conference Chair: Radu Serban, University of Wisconsin-Madison, USA, serban@wisc.edu

MSNDC Conference Co-chair: Zdravko Terze, University of Zagreb, Croatia, zdravko.terze@fsb.hr

MSNDC Program Conference Chair: Tamas Kalmar-Nagy, Budapest University of Technology and Economics, Hungary, kalmarnagy@gmail.com