



CALL FOR PAPERS

13th International Conference on Multibody Systems, Nonlinear Dynamics, and Control (MSNDC)

to be held in conjunction with the
ASME 2017 International Design Engineering
Technical Conferences
Cleveland Convention Center, Cleveland, Ohio, USA
August 6 - 9, 2017

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:

- Fluid-Structure Interaction
- Nonlinear Energy Transfers and Harvesting
- Dynamics of MEMS and NEMS
- 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
- Controls and Mechatronics
- Multi-physics in Multibody Systems and Nonlinear Dynamics
- Computational Methods in Multibody Systems and Nonlinear Dynamics
- Formulation of Real-Time Simulation
- Analytical and Perturbation Methods
- Software Tools for Computational Dynamics
- Benchmark Problems
- Computational Kinematics

All submissions are due by **Friday, February 10, 2017**. 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 will be sent later separately, and will be posted on the IDETC website. Funds will be made available to partially reimburse travel expenses of student attendees. We will also host a keynote presentation by the recipient of the prestigious Lyapunov Award. The call for nominations for the Award (**due January 01, 2017**) is at: <https://goo.gl/mhu57m>.

The full publication schedule is available at: <http://www.asmeconferences.org/IDETC2017/PublicationSchedule.cfm>

The solicited paper types are described on: <http://www.asmeconferences.org/IDETC2017/PaperTypes.cfm>

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

MSNDC Conference Chair: Sachin Goyal, University of California, Merced, USA, sgoyal2@ucmerced.edu

MSNDC Conference Co-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 Conference Co-chair: Jerzy Warminski, Lublin University of Technology, Poland, j.warminski@pollub.pl

MSNDC Student Paper Competition Chair: James R. Chagdes, Miami University, Ohio, USA, james.chagdes@miamioh.edu

MSNDC Student Paper Competition Co-chair: Mohammad-Ali Poursina, The University of Arizona, USA, mpoursina@gmail.com