

ISIFSM2K

Second International Symposium on Impact and Friction of Solids, Structures and Machines

Montreal, Canada, August 8-12, 2000

<http://www.control.utoronto.ca/people/profs/isifsm2k>

Call for Papers

ISIFSM2K will be held in Montreal during August 8-12, 2000. Montreal is a fun city with friendly people, European flavour and an abundance of restaurants and nightlife. The world's second-largest French-speaking city after Paris, Montreal is alive with French culture, romance and charm.

Scope/Topics of Interest

The aim of this symposium is to bring together engineers and scientists who are concerned with modelling, analysis, measurement and control of impact and friction of solids. It is hoped that this symposium will stimulate cross-fertilization of different disciplines involved in the impact and frictional aspects of solids, structures and machines and to promote the fundamentals as well as industrial applications.

Some topics of particular interest to guide prospective contributors are: * contact mechanics, namely mathematical models, tribological models, mathematical formulations, numerical methods and canonical solutions of unilateral contact * problems involving large slips, rolling, impacts, adhesion, dry friction, wear, heat transfer * history of friction, impact and tribology * friction and impact in atomic scale * analysis, modelling and measurement of friction in machining processes including milling, grinding and drilling * identification and compensation of friction in robot manipulators and structronic systems * vibration suppression by means of classical/nonclassical damping, particle impact damping, repeated loading * analysis and design of modern shock-absorbers * applications in multibody systems * smart materials and structures * analytical, numerical and experimental study of vibro-impact systems * measurement of vibro-impact processes * synthesis and optimisation of vibro-impact systems * excitation, synchronization and stabilization of vibro-impact processes * constitutive relations in granular media * effects of repeated impact on solids, structures and granular media * dynamics of vibro-impact machines and technological processes * nonlinear phenomena due to vibro-impact interaction of solids and structures * control and contact stability analysis of impact in robotics and structronic systems * manipulator collision with its environment: modelling and simulations * health monitoring and loss prevention of structures. * structural integrity * hysteretic behaviour with applications in SMA and seismic isolation devices to protect secondary systems * nonlinear modelling of offshore structures * energy dissipation in seismic loading * crashworthiness * bifurcation, instability, existence and uniqueness of solution * hemivariational inequalities, nonsmooth mechanics * applications in transportation systems, biomechanics, mechanical/civil/aerospace/ocean engineering.

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Authors Deadlines

Submission of extended abstracts:	December 15, 1999
Notification of acceptance:	January 15, 2000
Camera ready 4-page paper:	March 1, 2000

Abstract Submission

Extended abstracts should be limited to 1600 words or less. Email submissions are encouraged. One copy of abstract should be sent to:

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