

20th Canadian
Congress
of Applied
Mechanics

May 30 → June 2, 2005

le 20^{ième}
congrès
canadien
de mécanique
appliquée

30 mai → 2 juin 2005

SYMPOSIA AND SESSIONS

CANCAM 2005



Each session: 1hr, 40min; 4 or 5 papers

- Presentations are either on overheads or via electronic projection
- Each room is equipped with a PC, an electronic projector, and an overhead projector
- Authors are to provide an electronic file (PPT, PDF, ...) to the technical staff in the conference room before the session
- Use of author's own computer will not be allowed

Rooms:

McC = McConnell Eng. Bldg.

FDA = Frank Dawson Adams Bldg



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McGill

Montréal 

MAY 30, MONDAY - SESSIONS

8:00-9:00 Registration

9:00-9:30 Opening ceremony

9:30-10:25, McC204, Keynote Lecture 1: M.J. Floryan,

11:00-12:40	FSI-1	FFHT-1	MTMM-1
14:00-15:40	FSI-2	FFHT-2	MTMM-2
16:00-17:40	AE-1	FFHT-3	SM-1

18:00-20:00 Reception at Faculty Club, 3450 McTavish Street

MAY 31, TUESDAY - SESSIONS

9:30-10:25, McC204, Keynote Lecture 2: S.C. Cowin,

10:30-12:10	FSI-3	FFHT-4	SM-2
14:00-15:40	FSI-4	MS-1	DNM-1
16:00-17:40	AE-1	MS-2	DNM-2

JUNE 1, WEDNESDAY - SESSIONS

9:30-10:25, McC204, Keynote Lecture 3: F.C. Moon,

10:30-12:10	FSI-5	MS-3	BRM-1
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14:00-14:55 Keynote Lecture 4: C.M. Gosselin, Chair: J. Angeles

18:00 - 21:00 CONGRESS BANQUET

at Centre Mont-Royal 2200 Mansfield

JUNE 2, THURSDAY - SESSIONS

9:30-10:25, McC204, Keynote Lecture 5: E.H. Dowell,

10:30-12:10	FSI-6	MS-4	BRM-2
14:00-15:40	FSI-7	US-1	BRM-3
16:00-17:40	TEP	US-2	BRM-4

AE - Aeroelasticity

BRM - Bio-Rheological Modeling

DNM - Discrete and Nano-Mechanics

D - Dynamics

FFHT - Fluid Flow and Heat Transfer

FM - Fluid Mechanics

FSI - Fluid-Structure Interaction

KL - Keynote Lecture

11:10A New Wall Function Formulation Based on Power Laws for Pipe Flows Including Roughness Effects

O. G. Akinlade, D. J. Bergstrom

11:30 Visualization of Coherent Eddies in Turbulent Channel Flows by Direct Numerical Simulation

S.K. Das

11:50 Effects of Radial Position and Reynolds Number on Differential Diffusion in a Turbulent Jet

T. Lavertu, S. Gaskin, L. Mydlarski

US - UNCERTAIN SYSTEMS

→ SESSION 1 (JUNE 2, 15:00-16:40), McC211

CHAIR: A. SARKAR

15:00

On The Use Of Fuzzy Arithmetic For Automotive Crash Simulations In The Presence Of Uncertainty

M. Hanss, K. Willner

15:20

Design Assessment of Mechanical Structures Based on Fuzzy Dynamic Analysis

D. Moens, H. De Gerssem, D. Vandepitte

15:40

On a Generalized Buckling Problem with Fuzzy-Valued Material and Support Parameters

U. Gauger, S. Turrin, M. Hanss, L. Gaul

16:00

Uncertainty Modelling using Fuzzy Arithmetic based on Dimension-Adaptive Sparse Grids

A. Klimke

→ SESSION 2 (JUNE 2, 17:00-18:40), McC11

CHAIR: M. HANSS

17:00

Random Matrix Eigenvalue Problems in Probabilistic Structural Mechanics

S. Adhikari

17:20

Multi-Modal Probability Structure of a LCO with Random Excitation - Application to an Airfoil

D. Poirel, S.J. Price

17:40

La maintenance Prédicative d'une Machine Hydraulique en Utilisant le Filtre de Kalman

Y. Chinniah, R. Burton, S. Habibi, E. Sampson

18:00

Etude Probabiliste d'un Système Mécanique à Paramètres Incertains par une Technique Basée sur la Méthode de Transformation

S. Kadry, R. Younès

18:20

Comparison of FEM and Experimental Shell Vibration Results

X.J. Hu, R. Singhal, D. Redekop