

MORNING	SUNDAY 26/02	MONDAY 27/02	TUESDAY 28/02	WEDNESDAY 29/02	THURSDAY 01/03	FRIDAY 02/03
		STOCHASTIC MODELLING Chair: Eduardo de Cursi	STRUCTURAL DYNAMICS II Chair: Christian Soize	SOCIAL PROGRAM (STARTING 8:00)	SIGNAL PROCESSING Chair: Fernando Rochinha	FINITE ELEMENT Chair: Roberto Arruda
08:30-08:50		Christian Soize: Advanced method. for the identific. of stochastic models in computational mechanics. Cases of UQ for dynamical systems and mesoscale elasticity random fields for	Marc Mignolet: Response of Some Structural Dynamic and Aeroelastic Systems with High Sensitivity to Variability/Uncertainty		Pol Spanos: Emerging Signal Processing Techniques in Stochastic Structural Dynamics	109 Wim Desmet: Recent Advances in Interval and Fuzzy FE Analysis
08:50-09:10						
09:10-09:30		15 Rémi Croquet: Quantification of uncertainties on eigenlements of matrices with random coefficients	42 Rubens Sampaio: Stochastic analysis of the frictional forces of a drill-string on horizontal drilling		55 Fabio Cortivo: Comparison of two learning strategies for a supervised neural network	81 Giovanni Falson: The application of the Probability Transformation Method for the analysis of structures with
09:30-09:50		19 Rafael Lopez: Uncertainty quantification for algebraic systems of equations	64 Thiago Ritto: Robust multi-objective optimization of rotor bearing systems		56 Lidice Echevarria: The fault diagnosis inverse problem: ACO and fuzzy-ACO	91 Fabio Nascimento: Reliability analysis in a large finite element vehicle model
09:50-10:10		29 Mircea Grigoriu: Physically consistent models for stochastic for elliptic partial differential equations	97 Marcela Machado: Wave propagation in a cracked beam spectral element including parameter uncertainty		43 Marcelo Trindade: Effectiveness of spatial modal filters based on optimally designed arrays of piezoelectric	108: Wim de Mulder: Modeling Uncertainty in the Context of Finite Element Models with Distance-Based
10:10-10:40		BREAK	BREAK		BREAK	BREAK
TIME/SESSION		STRUCTURAL DYNAMICS I Chair: Marc Mignolet	VIBRATION CONTROL Chair: José Maria Santos		NONLINEAR DYNAMICS Chair: Pol Spanos	DYNAMICS Chair: Domingos Rade
10:40-11:00		48: Wim Desmet: Perturbation techniques for simulation of plates in mid-frequency range using efficient Wave Based	44 Tatiane Godoy: Analysis of the effect of uncertainties on the effectiveness of piezoelectric energy harvesting		26 Edson Cataldo: A computational method for updating a probabilistic model of an uncertain parameter in a	93 Antonio de Lima: Stochastic modeling of flexible rotors
11:00-11:20		63 Paulo Gonçalves: Physical and Geometrical System Parameter Uncertainties on Nonlinear Oscillations of	98 Domingos Rade: Fatigue Analysis of Viscoelastic Systems Subjected to Multiaxial Random Loads		53 Americo Cunha: On the Dynamics of a Nonlinear Continuous Random System	50 A. El-Hami: Numerical and experimental investigation of the dynamic behaviour of electronic systems
11:20-11:40		105 Luiz Góes: Robust Stability Analysis and Identification of Flutter	58 Paulo Varoto: Parameter Uncertainties in the Design and Optimization of Cantilever Piezoelectric Energy Harvesters	18 Peter Hagedorn: Construction of Liapounov functions for the estimation of basins of attraction	23 Marcelo Pivon: Non-Linear Dynamics of Rotating Composite Thin Walled Beams: Analysis of Modeling	
11:40-12:00		75 Roberta Lima: Analysis of Markov Chain Monte Carlo Method and Example of its Application in Random	45 Heinsten Santos: Active and passive vibration control using piezoelectric materials subjected to uncertainties on	52 José Balthazar: On Control Strategies, Including Parametric Errors, Applied to an Atomic Force Microscope Nonlinear	66 Mario Sandoval: Uncertainty Quantification in the Simplified Contact Problem Between Two Bodies	
12:00-13:30		LUNCH	LUNCH	LUNCH	LUNCH	
AFTERNOON	SUNDAY 26/02	MONDAY 27/02	TUESDAY 28/02	WEDNESDAY 29/02	THURSDAY 01/03	FRIDAY 02/03
TIME/SESSION		RISK ANALYSIS / MANUFACTURING Chair: André Beck	STOCHASTIC DYNAMICS Chair: Marcelo Trindade	ACOUSTICS Chair: Sondipon Adhikari	HEAT TRANSFER / METEOROLOGY Chair: Edson Cataldo	
13:30-13:50		Enrico Zio: Treatment of Uncertainties in Risk Assessment	Sondipon Adhikari: Novel Reduced Galerkin Projection Schemes for Stochastic Dynamical Systems	111 Vincent Martin: The fundamental elements in certain inverse acoustic problems: their roles and interactions	Hélcio Orlando: Inverse Heat Transfer Problems	
13:50-14:10						
14:10-14:30		27 Jorge Riera: On the consideration and quantification of uncertainties in Science and Engineering	36 Luciana Justino: A Nonparametric Approach for Uncertainty Quantification in Structural Dynamic Models	103 Leopoldo Oliveira: Vibro-acoustic modelling variability dispersion on a sound quality space	47 Renato Silva: Modeling of Scale Deposition in Heat Exchanger. The uncertainty problem	
14:30-14:50		82 Johannes Mathias and Kai Habermehl: Control of uncertainties within interdisciplinary design	12 Anas Batour: Stochastic reduced-order model for dynamical structures with high modal density in the low-	110 A. El-Hami: Reliability Analysis of Vibro-Acoustic Problem	78 Ariane dos Santos: A parametric study for firefly algorithm by solving an inverse problem for precipitation field	
14:50-15:10		41 Thais Santos: Development of a Methodology in order to consider Uncertainties in Life-cycle Assessment	14 Mickaël Suptille: Generation of stationary Gaussian processes for a high-cycle fatigue model Application	69 Alberto Diniz: Bayesian Estimation of Frequency-Dependent Acoustical Properties in a Kundt's Tube	106 Haroldo Campos Velho: Global Data Assimilation by Artificial Neural Networks for an Atmospheric Model	
15:10-15:30		20 Thomas Hauer: Uncertainties in Process Chains with Focus on the Drilling and Reaming Process	5 André Beck: Design-Point Excitation for Crack Propagation Under Narrow-Band Random Loading	39 Alice Cicirello: An Approach to Uncertainty Modeling with Application to Problems in Vibro-Acoustics	71 Helaine Furtado: Data assimilation by neural network emulating representer method applied to the wave equation	
15:30-16:00		BREAK	BREAK	BREAK	BREAK	
TIME/SESSION		PETROLEUM ENGINEERING Chair: Rubens Sampaio	OPTIMIZATION/RELIABILITY Chair: André Beck	STATISTICAL METHODS Chair: Haroldo C. Velho	CORROSION AND DAMAGE Chair: Roberto Machado	
16:00-16:20		6 Felipe Pereira: Multi-stage Markov Chain Monte Carlo methods for Porous media flows	112 Younes Aoues: Optimal design under uncertainty of reinforced concrete structures using system reliability	54 Emerson Albuquerque: Validation of adhesion models based on Bayesian inference	4 André Beck: Modelling Random Corrosion Processes via Chaos Polynomials	
16:20-16:40			67 Amarísio Araújo: Multi-objective optimization by an evolutionary algorithm for calibrating an hydrological	107 Julio Stern: Constructive Verification, Empirical Induction, and Fallibilist Deduction: A Threefold	101 Caio Nogueira: Corrosion Time Initiation Modeling Considering Uncertainties	
16:40-17:00		38 Souleymane Zio: A Stochastic Collocation Method Applied to Uncertainty Quantification in Hydraulic	100 Roberto Machado: Reliability Analysis of Nonlinear Reinforced Concrete Beams Subject to Ageing Effects	13 Carlos Pereira: Nested hypotheses: an example in genetics	90 Felipe Bazán: A stochastic model for failure assessment of corroded pipelines	
17:00-17:20		73 Gabriel Guerra: Analysis of flow-induced vibration model under uncertainties using an iterative workflow	94 Sofia Diniz: Design of Reinforced-Concrete Beams for Shear: Model Selection and Model Uncertainties	9 Ivan Sendin: Protein Structure Reconstruction with Data Uncertainties	34 Younes Aoues: Probabilistic assessment of thermal fatigue of solder joints in mechatronic packaging	
17:20-17:40		25 Helói Genari: A Damage Detection Technique Based on ARMA Models Distance Estimation	37 Rachid Ellaia: A global multiobjective optimization method for constrained engineering design problems	24 Viviane Maranhão: FBST for Covariance Structures of Gompertz Models		
17:40-19:30	REGISTRATION			Meeting of the ABCM Committee on Uncertainty Quantification and Stochastic Modeling		
19:30-21:30	OPENING AND COCKTAIL	DINNER	DINNER	DINNER	SPECIAL DINNER	