

Pre-nominated Session SM25

Structural vibrations

Co-Chair(s): **I. Blekhman (Russia)**
 K. Popp (Germany)

Paper ID	Title	Authors
SM25L_10166	Extreme Value Distribution and Dynamic Reliability of Stochastic Structures	Jianbing Chen, Jie Li
SM25L_10408	Experimental Study of Nonlinear Energy Pumping	D. Michael McFarland, Lawrence A. Bergman, Alexander F. Vakakis
SM25L_10470	Nonlinear Vibrations of Jeffcott Rotor with Preloaded Snubber Ring	Evgueni E. Karpenko, Marian Wiercigroch, Ekaterina Pavlovskaja
SM25S_10656	Non - Linear Stochastic Vibration Problems for the Plates with Time - Dependent Parameters	Victor Z. Gristchak, Valentin V. Lysenko
SM25S_10750	A Multi - Step Transversal Linearization Method in Nonlinear Dynamics	Debasish Roy
SM25L_10863	Equivalent Stochastic Linearization as an Alternative to Solving the Fokker - Planck Equation	Stephen H. Crandall
SM25L_11055	Nonlinear Effects, Observed in the Process of the Liquid Flowing Out of the Vibrating Vessels: Theory, Experiment and Applications	I. I. Blekhman, L. I. Blekhman, L. A. Vaisberg, V. B. Vasilkov, K. S. Yakimova
SM25S_11066	Propagation Analysis of Flexural Waves by Wavelet Transform	Akihiko Higashi, Fumihiro Mizuguchi
SM25S_11079	Bifurcations of Damped Nonlinear Normal Modes: Linear Oscillator with Strongly Nonlinear Attachment	Oleg V. Gendelman
SM25L_11082	Effect of Root Flexibility on the Aeroelastic Analysis of a Composite Wing Box	Gamal M. Ashawesh, Ali M. Elmabrok, Tarek A. Abdunabi, Alakrami A. Nakas
SM25L_11246	Reanalysis of an SEA High - Frequency Vibration Calculation Based on the VTCR	Herve Riou, Pierre Ladeveze

SM25L_11261	Active Control of Disk Brake Squeal	Utz von Wagner, Daniel Hochlenert, Peter Hagedorn
SM25L_11273	Experimental and Theoretical Modal Analysis of Three Support Rotor Test Rig Using LMS CADA-X and ABAQUS	Marcin Luczak
SM25S_11338	Stability of a Rotor with Periodically Varying Angular Velocity	J. P. Meijaard
SM25S_11384	Paradoxical Behaviour of Vibrating Systems Challenging Rayleigh's Theorem	Tibor Tarnai
SM25S_11494	Imperfection Sensitivity of Circular Arch's Non - Linear Modes	Carlos E. N. Mazzilli, Odulpho G. P. Baracho Neto, Mario E. S. Soares, Cesar T. Sanches
SM25S_11536	Optimal Shapes of Parametrically Excited Beams	Alexei A. Mailybaev, Hiroshi Yabuno, Hiroyuki Kaneko
SM25S_11679	Non Trivial Effect of Strong High - Frequency Excitation on a Nonlinear Controlled System	Alexander Fidlin, Jon J. Thomsen
SM25S_11699	An Approach to Worm - Like Motion	Klaus Zimmermann, Igor Zeidis, Joachim Steigenberger, Mikhail Pivovarov
SM25S_11712	Dynamics of a Rotor Rolling Along a Circular Surface	Alla D. Firsova
SM25S_11716	The New Statement of Problem of Unbalance Identification	Yuri L. Mehshikov, Nikolaj V. Polyakov
SM25S_11719	Vibrorheology: Main Results, New Problems	Iliya Blekhman, Ekaterina Shishkina
SM25S_11759	Nonlinear Vibrations of Gear Drives	Vladimir Zeman, Miroslav Byrtus, Michal Hajzman
SM25L_11783	Passive Vibration Control of a Piecewise Linear Beam System	Rob H. B. Fey, Joris H. Bonsel, Henk Nijmeijer
SM25S_11834	A power Flow Mode Theory Based on Inherent Characteristics of Damping Distributions in Systems and Its Applications	Y. Xiong, J. T. Xing, W. G. Price

SM25S_11867	Stability of a Spinning Disk Under a Stationary Oscillating Unit	T. H. Young, C. Y. Lin
SM25S_11904	High Revolving Speed Spindles Definition Due to Transient Vibration Conditions	Mehdi S. Zangeneh, Seyed S. H. Yazdi
SM25S_12026	Suppressing Self - Excited Vibrations in a Coupled Pendulum System	Fadi Dohnal, Ecker Horst
SM25L_12322	The Running Behaviour of an Elastic Wheelset	Ingo Kaiser, Karl Popp
SM25L_12404	Thermoelastic Relaxation in Thin Plates with Applications to MEMS and NEMS Oscillators	Andrew N. Norris, Douglas M. Photiadis
SM25S_12498	Estimation of the Vibration Energy Characteristics for Joints of Constructional Elements	Jacek Cieslik
SM25S_12511	Sound Radiation by the White Noise Excited Viscoelastic Shallow Shells	Marek S. Kozien, Jozef Nizioł
SM25L_12535	Self - Excited Stick - Slip Oscillations of Drag Bits	Thomas Richard, Christophe Germy, Emmanuel Detournay
SM25L_12593	Vibration Characteristics of the Main Tower, the Byaon Temple	Yoshikazu Sugiura, Yuki Fukumoto, Toshiro Maeda
SM25S_12632	Application of Extended Phase Space to Investigation of Forced Biharmonic Oscillations	Michael I. Kazakevitch, Viktorija E. Volkova
SM25S_12659	Non - Linear Modelling of Earthquake Induced Pounding of Buildings	Robert Jankowski
SM25L_12694	Discontinuous Transformations and Averaging for Vibro - Impact Analysis	Jon Juel Thomsen, Alexander Fidlin
SM25L_12759	Experimental Analysis of Modal Interactions in the Non - Linear Vibrations of a Plate	Pedro Ribeiro
SM25L_12770	Optimum Selection of Design Features of Electromechanical Drive Systems Incorporating a Control Unit	Pawel Bachorz, Arkadiusz Mezyk, Eugeniusz Switonski
SM25L_12785	Mode Switching of Rain - Wind Induced Vibrations	Christian Seidel, Dieter Dinkler

SM25S_12814	Regenerative Tool Chatter Near a Codimension - 2 Hopf Point	Pankaj Wahi, Anindya Chatterjee
SM25S_12842	Axial Decay of Time Harmonic End Perturbation in Prestretched Hyperelastic Plates	Baruch Karp, David Durban
SM25S_12890	Vibration of the Train/Track System with Two Types of Sleepers	Roman Bogacz, Czeslaw Bajer
SM25S_12977	Characteristics of Vibroacoustic Signals in Diagnosing Early Stages of Defects	Stanislaw Radkowski, Jan Samsonowicz
SM25S_12984	Entering the Excitation into a Mechanical System with Dynamic Eliminators of Vibration	Tadeusz Majewski, Roza Sokolowska, Vadiraja Sudhakar
SM25S_12989	Frictional Auto - Oscillations under the Action of Almost Periodic and Periodic Excitations	Konstantin V. Avramov, Jan Awrejcewicz, Gayane V. Manucharyan