GAMM2025

Thursday 10 April 2025

S05: Nonlinear Oscillations: S05.01 - Room 1.27 (08:30 - 10:30)

-Conveners: Ulrich Römer; Roman Starosta

time	[id] title	presenter
08:30	[119] Dynamics of Two Coupled Bodies on a Rough Horizontal Plane with Variable Coefficient of Friction	PROKOPENYA, Alexander
08:50	[120] Pure Mobility: Rolling resistance in future vehicle-road systems	RUFF, David
09:10	[121] Secular Perturbations of the Orbital Elements in the Maby-Body System with Variable Masses	SAPAROVA, Moldir
09:30	[122] Frequency analysis of a Superconducting Magnetic Bearing system in ring spinning using an Eddy Current Damper	PEREZ DELGADO, Yves Jesus
09:50	[123] Peculiarities of Amplitude-Frequency Characteristics in Geometrically Nonlinear Vibrations of Composite Shells and Plates under Various Deformation Models	GORIACHKO, Taras MARCHUK, Mykhailo
10:10	[124] On the Influence of Cracks on the Dynamic Behavior of PICMA® Multilayer Actuators	RIEDEL, Simon

S05: Nonlinear Oscillations: S05.02 - Room 1.27 (14:00 - 16:00)

-Conveners: Ulrich Römer; Roman Starosta

time	[id] title	presenter
14:00	[130] Multi-Stable Systems: Nonlinear Dynamics and Energy Harvesting	WARMIŃSKI, Jerzy
14:40	[126] Forced response analysis of dynamic systems with inertia nonlinearity by applying the Multi-Harmonic-Balance Method	TATZKO, Sebastian
15:00	[127] Integration of Base Excitation with non-linear Coupling within the Multiharmonic Balance Method	KUBATSCHEK, Tido
15:20	[128] Stability analysis using predictor-corrector continuation to develop Ince-Strutt diagrams for a nonlinear parametric oscillator	JONKEREN, Mirco
15:40	[129] A MATLAB Toolbox for the continuation of stationary solution branches	VOGELEI, Julian

S05: Nonlinear Oscillations: S05.03 - Room 1.27 (16:30 - 18:30)

-Conveners: Ulrich Römer; Roman Starosta

time	[id] title	presenter
16:30	[131] Slow-fast oscillations of an elastic double pendulum	STEINDL, Alois
16:50	[132] Optimal l^p-Norm for Robust Integrity Measures of Safe Basins in High-Dimensional Systems	NOVELLI, Nico
17:10	[133] Mechanism of self excitation of silos for particles	KRÖGER, Matthias
17:30	[134] Investigations on Sensitivity of AFM Cantilevers Using Parametric Resonance	EHRMANN, Jonathan

| 17:50 | [125] A new paradigm for multi-fidelity continuation using parallel model refinement | GROSS, Johann |

Friday 11 April 2025

S05: Nonlinear Oscillations: S05.04 - Room 1.27 (08:30 - 10:30)

-Conveners: Ulrich Römer; Roman Starosta

time	[id] title	presenter
08:30	[135] Inverse Problems for Weakly Nonlinear Boundary-Value Problems with Delay	CHUIKO, Sergey
08:50	[137] Consideration of non-linear oscillations under uncertainties in the context of the electrical activity of pancreatic β-cells	CLASEN, Paula
09:10	[138] An Analysis of Linear and Nonlinear Flexural Vibration of Bimodular Tapered Beams	EL CHABAAN, Galeb
09:30	[136] Nonlinear Periodic Boundary Value Problems with Switching at Non-Fixed Points in Time	NESMELOVA, Olga