

**Monday (14/12/2020)**

Time	Session	Chair	Speaker	Title
	<i>Zoom link</i>			
08:45	<b>Opening Ceremony</b>			
09:00	<b>Opening Lecture</b>	Marian <a href="#">Wiercigroch</a>	Irina <a href="#">Goracheva</a>	Effect of Mechanical Properties of Contacting Bodies on Deceleration Process
09:40	<b>Coulomb</b>	Emil <a href="#">Manoach</a>	Yao <a href="#">Yan</a>	Nonlinear Analysis of Regenerative and Frictional Cutting Dynamics Based on New Model
10:00			Oleksandr <a href="#">Menshykov</a>	Interface Cracks under Harmonic Shear: Effects of Contact and Friction
10:20			Andrzej <a href="#">Stefanski</a>	Synchrony in Frictional Oscillators
10:40			Georg <a href="#">Jehle</a>	Geometric Judder in Automotive Multi-Disk Clutches: Stochastic Simulation Approach
10:50			Heba <a href="#">El-Mongy</a>	Effect of Borehole Stiffness Asymmetry on the Dynamic Behaviour of Drill-Strings
11:00			Tamer <a href="#">El-Sayed</a>	Stability of Journal Bearing Based on Second Order Stiffness and Damping Parameters

**11:10 Comfort Break***Zoom link*

11:20	<b>Euler</b>	Zuzana <a href="#">Dimitrova</a>	Emil <a href="#">Manoach</a>	Vibration of a Cantilever in Micro-Channel Interacting with Rarefied Gas Flow
11:40			Patrick <a href="#">O'Brien</a>	Nonlinear Beam Approximations to Principle of Virtual Work
12:00			Krzysztof <a href="#">Kecik</a>	Role of Electromechanical Coupling in the Vibration Absorber/Harvester System
12:20			Andrés <a href="#">García</a>	Energy Harvesting from Rotating Parametric Pendulum via Optimal Control
12:30			Santhosh <a href="#">B</a>	Energy Harvesting Performance of Adaptive Snap Through Oscillator
12:40			Lukasz <a href="#">Kloda</a>	Flexural 3:1 Internal Resonances in Hinged Supported Beams with Axial Spring

**12:50 Comfort Break***Zoom link*

13:00	<b>Plenary Lecture</b>	Tomasz <a href="#">Kapitaniak</a>	Muhammad <a href="#">Hajj</a>	Vibration-Based Energy Harvesting and Transmission
13:40	<b>Lyapunov</b>	Janko <a href="#">Slavic</a>	Yuri <a href="#">Mikhlin</a>	Resonance Vibration of the Non-Ideal System Having Mises Girder as Absorber
14:00			Victoria <a href="#">Kurushina</a>	Vortex-Induced Vibration of Flexible Risers in Ocean Currents
14:20			Sergey <a href="#">Lekomtsev</a>	Suppression of Resonance Vibration of Rectangular Plate Interacting with Fluid
14:40			Sandor <a href="#">Beregi</a>	Numerical Bifurcation Analysis of Oscillating Aerofoil under Noise-Load
14:50			Gustavo <a href="#">Anjos</a>	Fluid-Structure Interaction Analysis on Pipe Conveying Fluid Using Turbulent Stochastic Modeling
15:00			Guilherme <a href="#">Jorge Vernizzi</a>	Invariant Manifolds for Analysis of Flexible Cylinders Under Vortex-induced Vibration
15:10			Mark <a href="#">Stremmler</a>	Modeling Quasi-steady Fluid Forces on Trailing Cylinder in Tandem Pair

**15:10 Comfort Break***Zoom link*

15:20	<b>Poincare</b>	Stefano <a href="#">Lenci</a>	Tomasz <a href="#">Kapitaniak</a>	Chimera States for Coupled Pendula
15:40			Jun <a href="#">Jiang</a>	Global Analysis of Nonlinear Dynamical Systems with Concepts and Methods from Data Science
16:00			Marcelo <a href="#">Savi</a>	Mechanical Description of Origamis
16:20		Oleksandr <a href="#">Menshykov</a>	Sabine <a href="#">Upnere</a>	Inverse Modelling of Rod Behaviour in Flow Using Surrogate-Based Approach
16:30			Shanti <a href="#">Kandala</a>	Evolution of Friction Parameters Along Well
16:40			Cezary <a href="#">Graczykowski</a>	Mathematical Formulations of Dynamic Response Mitigation for Semi-active Fluid Absorbers
16:50			Rami <a href="#">Faraj</a>	Control of the Fluid-Based Absorbers under Impact and Vibration Conditions
17:00			Luboš <a href="#">Smolík</a>	Application of Feedforward Networks to Evaluate Joint Forces in Multibody Systems
17:10			Idin <a href="#">Nazzari</a>	Dynamics of High Frequency Impact in Jarring Operations
17:20			Phablo <a href="#">Ramos Carvalho</a>	Chimera State Analysis via Energetic Approach

**Tuesday (15/12/2020)***Zoom link*

Time	Session	Chair	Speaker	Title	Zoom link
09:00	<b>Plenary Lecture</b>	Marian <a href="#">Wiercigroch</a>	Debasish <a href="#">Roy</a>	Geometrically Developed Stochastic Dynamics and Applications	
09:40	<b>Newton</b>	Yao <a href="#">Yan</a>	Wei qiu <a href="#">Chen</a>	Axisymmetric Vibration of Soft Electroactive Cylindrical Shells	
10:00			Yufeng <a href="#">Xing</a>	Parameter Spectral Analysis Theory and Generalized Central Difference Method	
10:20			Rafal <a href="#">Rusinek</a>	Nonlinear Vibration in Bio-Electro-Mechanical System of Human Middle Ear	
10:40			Qingjie <a href="#">Cao</a>	SD Oscillators, Isolators and Suspensor Free of Resonance	

**11:00 Comfort Break***Zoom link*

11:20	<b>Watt</b>	Jerzy <a href="#">Wojewoda</a>	Hiro taka <a href="#">Araki</a>	Shift Manipulation of Intrinsic Localized Mode in AC Driven Klein Gordon Lattice	
11:30			Rahul <a href="#">Mishra</a>	Effect of Damping on Vortex-Induced Vibration of Circular Cylinder on Nonlinear Spring Support	
11:40			Ning kang <a href="#">Zhang</a>	Crack-Tip Stress Field due to Presence of Isotropic Dilatational Inclusions	
11:50			Aasifa <a href="#">Rounak</a>	Tracking Survivability of Solutions in Nonlinear Dynamical Systems	
12:00			Mate <a href="#">Vizi</a>	Control of Cyclic Systems	
12:10			Jiajia <a href="#">Zhang</a>	Development of a Vibro-Impact Self-Propelled Capsule in Millimetre-Scale	
12:20			Van-Du <a href="#">Nguyen</a>	Comparative Study of Vibro-Driven Capsbot	
12:30			Marcin <a href="#">Kowalczyk</a>	Dynamics of Cantilever Active Bimorph Beam with Electro-Magneto-Mechanical Coupling	

**12:40 Comfort Break***Zoom link*

13:00	<b>Plenary Lecture</b>	Giuseppe <a href="#">Rega</a>	Stefano <a href="#">Lenci</a>	Nonlinear Waves in Beams on Tensionless Substrates	
13:40	<b>Duffing</b>	Carlos <a href="#">Mazzilli</a>	Vikram <a href="#">Pakrashi</a>	Real-Time Monitoring and Assessment of Dynamical Systems	
14:00			Andrzej <a href="#">Mitura</a>	Piezoelectric Actuator Hysteresis and Its Influence on Efficiency of Vibration Controllers	
14:20			Todor <a href="#">Todorov</a>	Vibrating Thermal Energy Harvester with Shape Memory Alloy and Piezoelectric Transducer	
14:40			Americo <a href="#">Cunha Jr</a>	Optimization of Energy Harvester via Cross-Entropy Method	

**15:00 Comfort Break***Zoom link*

15:10	<b>Maxwell</b>	Marcelo <a href="#">Savi</a>	Dimitri <a href="#">Danulussi Alves Costa</a>	Controlled Exchange of Co-Existent Attractors	
15:20			Agustín <a href="#">Hernández Rocha</a>	Analytical Method for Piecewise Linear Oscillators	
15:30			Aidan <a href="#">Lee</a>	Effects of Oscillating Pegs in a Galton Board	
15:40			Virgilio <a href="#">Caetano</a>	Multimodal Pizza-Shaped Piezoelectric Vibration-Based Energy Harvesters	
15:50			João <a href="#">Canisso Vales Norenberg</a>	Application of the Global Sensitivity Analysis on a Bistable Energy Harvester	
16:00			Dan <a href="#">Wang</a>	Nonlinear Energy Harvesting from Rotating System	
16:10			Favour <a href="#">Okosun</a>	Biological Sensor for Structural Health Monitoring	
16:20		Patrick <a href="#">O'Brien</a>	Breno <a href="#">Ayres Pereira Mendes</a>	Energy Harvesting Using a Non-linear Vibration Absorber with a Piezoelectric Element	
16:30			Zhifeng <a href="#">Hao</a>	Modelling of Electromagnetic Actuator	
16:40			Vinod <a href="#">Yadav</a>	Material Dependent Parameters and Friction in UV Assisted Turning by Inverse Modelling	
16:50			Fernando <a href="#">Burgos</a>	Numerical Analysis of Active Coil-Magnet Vibration Actuator	
17:00			Samuel <a href="#">da Silva</a>	Detecting Loss of Tightening Torque in Bolted Joints Using Gaussian Process Regression	
17:10			Amin <a href="#">Taraghi Osguei</a>	Nonlocal Shell Model for Vibration Analysis of Carbon Nanoscrolls	

*Zoom link***18:00 Virtual Banquet**

**Wednesday (16/12/2020)***Zoom link*

Time	Session	Chair	Speaker	Title	Zoom link
09:00	<b>Plenary Lecture</b>	<u>Weiqiu Chen</u>	<u>Keith Davey</u>	Scaled Dynamics	
09:40	<b>Bernoulli</b>	<u>Jerzy Warminski</u>	<u>Ling Hong</u>	Fuzzy Noise-Induced Bifurcations by Fuzzy Cell Mapping with Adaptive Interpolation	
10:00			<u>Yusheng Zhou</u>	Nonholonomic Constraints and Motion Control of Wheeled Mobile Structures	
10:20			<u>Jian Yang</u>	Vibration Energy Flow Analysis of Smooth and Non-Smooth Nonlinear Dynamical Systems	
10:40			<u>Jan Rendl</u>	Dynamics of Jeffcott Rotor Supported by Tilting-pad Journal Bearings	
10:50			<u>Lijun Pei</u>	The short and long termed predictions of COVID-19 in different countries in the world	
11:00			<u>Bugra Bayik</u>	Distance Metric Learning for Vibration-Based Structural Damage Detection	

**11:10 Comfort Break***Zoom link*

11:20	<b>Stevenson</b>	<u>Ian Howard</u>	<u>Antonio Chong</u>	Lyapunov Exponents for Non-Smooth Systems via the Computational Suite ABESPOL	
11:30			<u>James MacLean</u>	Linear Integral Resonant Controller for Suppressing Stick-Slip of Underactuated Drill-String	
11:40			<u>Paul Mucchielli</u>	Simulation of Pendulum Tuned Mass Damper under Random Excitation	
11:50			<u>Evgenii Kozhevnikov</u>	Influence of Pressure Waves on the Near Bottom Hole Formation Zone Permeability	
12:00			<u>Weicheng Li</u>	Dynamics and Energy Saving Control of SRP Systems	
12:10			<u>Sze-Hong Teh</u>	Attractors of Rotating Pendulums	
12:20			<u>Ali Hassanirad</u>	Numerical modelling of dynamic crack propagation in fatigue experiment	
12:30			<u>Dou Xie</u>	Nonlinear Dynamics of Lump Mass Model of Drill-String in Horizontal Well	
12:40			<u>Alexey Voropay</u>	Active Control of Nonstationary Vibration in Plates Under Dynamic Loading	

**12:50 Comfort Break***Zoom link*

13:00	<b>Bell</b>	<u>Vahid Vaziri</u>	<u>Maolin Liao</u>	Numerical and Experimental Study of Bit-Rock Vibro-Impact System	
13:20			<u>Joseph Páez Chávez</u>	Numerical Continuation Approach to Study Piecewise-Smooth Systems with Delay	
13:40			<u>Mahashweta Patra</u>	Effect of Stochastic Switching Surface in Nonsmooth Systems	
14:00			<u>Pawel Platek</u>	Mechanical Behaviour of 3D Printed Polyurethane Honeycomb Structures	
14:20			<u>Jerzy Wojewoda</u>	High-Speed Video Recording Method to Track Double Pendulum Motion	
14:40			<u>Janko Slavič</u>	High-Speed Camera Analysis in Structural Dynamics and Vibration Fatigue	

**15:00 Comfort Break***Zoom link*

15:10	<b>Logie Baird</b>	<u>Marcin Kapitaniak</u>	<u>Alicia Terrero Gonzalez</u>	Is Wave Energy Untapped Potential?	
15:20			<u>Siqi Li</u>	Application of Resonance Enhanced Drilling to Coring	
15:30			<u>Rimma Abdrashitova</u>	Application of Hydrogeological Data in Search for Oil Fields in Western Siberia	
15:40			<u>Abd Jaffal</u>	Design and Testing of Resonance Enhanced Scale Milling Tool for Hard Scales	
15:50			<u>Evgenii Riabokon</u>	Nonlinear Young's Modulus of New Red Sandstone	
16:00			<u>Mohammad Khodadadi Dehkordi</u>	Dynamics of Drill-String with Anti Stick-Slip Tool	
16:10			<u>Vladimir Poplygin</u>	Effect of Low Frequency and High Amplitude Fluctuations on Oil Production	
16:20			<u>Ali Farhangfar</u>	Observer and Model Predictive Control Design for Suppression of Stick-Slip Oscillations	
16:30	<b>Closing Lecture</b>	<u>Ekaterina Pavlovskaya</u>	<u>Andrei Metrikine</u>	Dynamics of Monopoles for Offshore Wind Turbines: Installation, Acoustics and Monitoring	
17:40	<b>Closing Ceremony</b>				