Scientific program of the e-Workshop Advances in ELAstoDYNamics of architected materials and BIOmaterials

Thursday November 12th

9h00	Welcome		
9h30	**EREMEYEV**	**Victor**	*Gdansk University of Technology, Poland*
	On effective properties of beam-lattice structures made of flexoelectric materials		
9h50	**DELL'ISOLA**	**Francesco**	*University of L'Aquila, Italy*
	Micro-architecture synthesis for metamaterials		
10h10	**CUOMO**	**Massimo**	*University of Catania, Italy*
	Discrete homogenization of networks and tissue with high mechanical performance		
10h30	*Break*		
11h00	**ROSI**	**Giuseppe**	*Université Paris-Est Créteil, France*
	Generalised continua in biomechanics : from multi scale tissues to biomechanical metamaterials		
11h20	**AGHAEI**	**Ali**	*Université Paris-Est Créteil, France*
	Wave propagation across the tendon-to-bone interphase: insight from an equivalent model with specific interface conditions		
11h40	**TOUBOUL**	**Marie**	*Aix-Marseille Université, France*
	High-frequency homogenisation in 1D periodic media with imperfect interfaces of the spring-mass type		
12h00	**PLACIDI**	**Luca**	*International Telematic University Uninettuno, Italy*
	Evolution of damage and plasticity in a variational framework without flow rule assumptions		
12h20	*Lunch break*		
14h00	**LOMBARD**	**Bruno**	*Aix-Marseille Université, France*
	Unfolding of a bistable tape spring: analogy with a regularizd Ericksen bar with nonconvex potential and extended Lagrangian		
14h20	**DAVi**	**Fabrizio**	*Università Politecnica delle Marche, Italy*
	Wave propagation in micromorphic anisotropic continua with an application to PWO tetragonal crystals		
14h40	**UNGUREANU**	**Bogdan**	*Imperial College London, UK*
	Energy harvesting elastic edge waves via the topological rainbow effect		
15h00	**GANGHOFFER**	**Jean-François**	*University of Lorraine, France*
	Effect of microinertia and higher gradients on the statics and dynamics of heterogeneous media		
15h20	*Break*		
15h50	**CORNAGGIA**	**Rémi**	*Sorbonne Universités, France*
	Tuning effective dynamical properties of periodic media by FFT-accelerated topological optimization		
16h10	**NASSAR**	**Hussein**	*University of Missouri, USA*
	Polar metamaterials and cloaking		
16h30	**BABLU**	**Muhammad A**	*Oklahoma State University, USA*
	Sound Transmission Loss Behavior of Meta-Acoustic Barriers with Anomalous Effective-Mass		

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9h30	**ALLAIN**	**Jean-Marc**	*École Polytechnique, France*
	Observation of the microstructure evolution during a mechanical assay on cardiac tissue		
9h50	**COLORADO CERVANTE**	**José Ivan**	*Université Paris-Est Créteil, France & University Roma Tre, Italy*
	Evaluation of the principal strain lines for assessment of the Left Ventricular function		
10h10	**TERESI**	**Luciano**	*University Roma Tre, Italy*
	Liquid transport in active soft matter		
10h30	*Break*		
11h00	**GEORGE**	**Daniel**	*Université de Strasbourg, France*
	First results on bone density variation under high loads through the competition between osteoblasts and osteoclasts		
11h20	**SANSALONE**	**Vittorio**	*Université Paris-Est Créteil, France*
	A model of bone turnover in the framework of generalized continuum mechanics		
11h40	**DOT**	**Gauthier**	*Arts et Metiers ParisTech & Université Paris-Est Créteil, France*
	Clinical and numerical study of a statically determinate lingual mechanism for orthodontic tooth displacement		
12h00	**GIORGIO**	**Ivan**	*University of L'Aquila, Italy*
	A diffusive model to describe the mechanically driven biological stimulus for bone remodeling: following in the footsteps of Roux and Frost		
12h20	*Lunch break*		
14h00	**EUGSTER**	**Simon**	*University of Stuttgart, Germany*
	Finite element formulation for constrained spatial nonlinear beam theories		
14h20	**GRECO**	**Leopoldo**	*University of Catania, Italy*
	A non linear G1-conforming Bèzier finite element formulation for the analysis of slender beams		
14h40	**BARCHIESI**	**Emilio**	*University of L'Aquila, Italy*
	Homogenised modeling of bi-pantographic fabrics: micro-to-macro transition and experimental validation		
15h00	*Closing*		