

Speakers and titles of the talks

Arias, Irene	Modeling and simulation of fracture in ferroelectric polycrystals
Ariza, Pilar	Engineered graphene based devices
Arroyo, Marino	Mechanics of confined solid and fluid thin films: graphene and lipid bilayers
Blesgen, Thomas	A Tucker Tensor approach for Kohn-Sham density functional theory
Cirak, Fehmi	Multiresolution subdivision surfaces in variational shape optimisation
Conti, Sergio	Folding patterns in partially delaminated thin films
Cuitino, Alberto	Non-local particle simulations reveal post-jamming response of highly confined granular solids
DeSimone, Antonio	Bio-inspired crawling motility across length scales: opportunities and challenges
Espanol, Malena	A Gamma-Convergence Analysis of the Quasicontinuum Method
Fraternali, Fernando	On the constitutive response and the wave dynamics of tensegrity lattices
Garroni, Adriana	Metastability and dynamics of screw discrete dislocations
Gavini, Vikram	Large-scale real-space Kohn-Sham density functional theory calculations
Govindjee, Sanjay	Variational upscaling in plasticity and viscoelasticity
Gürses, Ercan	Modeling of Spherulite Microstructure in Semicrystalline Polymers
Heyden, Stefanie	A micromechanical damage and fracture model for polymers based on fractional strain-gradient elasticity (poster)
James, Richard	How to find a better shape memory alloy than NiTi
Kochmann, Dennis	The Quasicontinuum Method Revisited: Recent Advances and Open Challenges
Kuhl, Ellen	A mechanical model explains brain development
Larsen, Christopher	Threshold formulations for material defects
Lew, Adrian	The simulation of brittle fracture problems with universal meshes
Leyendecker, Sigrid	Structure preserving multirate integration of constrained systems
Li, Bo	Dynamic inelasticity and failure in cryogenic ice under extreme loading conditions
Marian, Jaime	Atomistically-informed kinetic Monte Carlo simulations of Screw Dislocation Motion in Tungsten
Markenscoff, Xanthippi	Hadamard Instability Analysis for coupled thermo-mechanochemical Systems
Mielke, Alexander	Gradient structures and homogenization for thermomechanical systems
Molinari, Alain	A micro-mechanical approach for the dynamic fracture of ductile materials
Molinari, Jean Francois	A finite temperature atomistic/continuum coupled model for contact applications
Needleman, Alan	The Competition between Failure and Localization of Deformation in Progressively Softening Solids
Negri, Matteo	Quasi-static evolutions for a phase field model in fracture
Owhadi, Houman	Bayesian Numerical Homogenization
Rimoli, Julian	A Concurrent Multi-Scale Model for the Thermo-Mechanical Response of Materials
Romero, Ignacio	A fully Lagrangian method for fluid/solid interaction
Schmidt, Bernd	An analysis of crystal cleavage in the passage from atomistic models to continuum theory
Sulsky, Deborah	Convergence and Accuracy of the Material-Point Method
Yavari, Arash	Differential Complexes in Continuum Mechanics
Yu, Rena	Meshfree numerical schemes applied to unconfined seepage problems through earth dams