



RECENT ADVANCES IN MECHANICS AND MATHEMATICS OF MATERIALS

2nd International Meeting of Young Researchers

Rome, 18-20 November 2019 - Faculty of Civil and Industrial Engineering

Keynote Lectures

Kaushik BHATTACHARYA

California Institute of Technology (USA)

Liquid crystal elastomers

Michel DESTRADE

NUI Galway (Ireland)

Mechanics of the brain

Yi-Chao CHEN

University of Houston (USA)

Mechanics of Growth and Growth of Mechanics

Roberto PARONI

University of Pisa (Italy)

From graphene to microscopically piece-wise rigid plates

Speakers

Jeremy BLEYER (France)

*An overview of computational limit analysis
for civil engineering applications*

Federico BOSI (UK)

The onset of plasticity through inflation of soft membranes

Laurence BRASSART (UK)

Micromechanics of near-ideal polymer networks

Shawn A. CHESTER (USA)

Experiments and Modeling of Viscoelastic Polymer Gels

Andrew T. CONN (UK)

*Harnessing the non-linear behaviour of dielectric elastomers
for soft robotics*

Vito CRISMALE (France)

*Existence and approximation of equilibrium configurations
for epitaxially strained crystalline films*

Moumita DAS (USA)

*Anomalous phase separation in co-cultures of cells with
different mechanical properties*

Elisa DAVOLI (Austria)

*Two-well rigidity and multidimensional sharp-interface limits
for solid-solid phase transition*

Andrej KOŠMRLJ (USA)

*Mechanical Instabilities in Growing Biological Systems:
Wrinkling and Branching*

Claire LESTRINGANT (Switzerland)

*Higher-order models for the analysis of localized instabilities
in elastic slender solids*

Derek E. MOULTON (UK)

Morphorods: pattern formation in growing elastic rods

Gianluca ORLANDO (Germany)

*Mathematical modeling of the nonlinear
mechanical response of graphene monolayers*

Paolo PIOVANO (Austria)

*Microscopic justification of a model for epitaxially-strained
crystalline films*

Tomoiko G. SANO (Switzerland)

*Slip or (k)not: Geometry and mechanical performance
of physical knots*

Brian SEGUIN (USA)

Isometric deformations: closed ribbons and beyond

Gal SHMUEL (Israel)

*Stimulus-Momentum Coupling in Active Metamaterials
with Broken Symmetry*

Ian TOBASCO (USA)

The cost of crushing: curvature-driven wrinkling of thin films

Hervé TURLIER (France)

Mechanics of early embryo morphogenesis

DIPARTIMENTO
DI INGEGNERIA STRUTTURALE
E GEOTECNICA



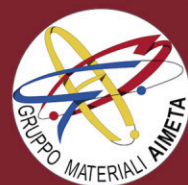
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