



PL/TPL Lecture List

Plenary Lectures:

Paulo Lourenco, University of Minho, Portugal

Computational applications in masonry structures: From the mesoscale to the super-large / super-complex

Somnath Ghosh, Johns Hopkins University, MD, USA

A Computational Multiscale Framework for Coupled Transient Electromagnetic-Mechanical Phenomena for Antenna and Sensors

Schmauder Siegfried, University of Stuttgart, IMWF, Germany

Multiscale Simulation of Metals from Atoms to Components

Thematic Plenary Lectures:

Jose Andrade, California Institute of Technology, CA, USA

Computational and experimental approaches to planetary science and missions—the role of celestial soil mechanics

Fangsen Cui, Institute of High Performance Computing, A-Star, Singapore

Computational device mechanics –the design and computation in acoustics and biomechanics

Raj Das, RMIT University, Melbourne, Australia

Multiscale Damage Modelling of Sustainable Composite Structures

Fernando Fraternali, University of Salerno, Italy

On the Dynamics of Highly Nonlinear Lattice Materials

Xiaowei Gao, Dalian University of Technology, China

A new meshfree method: free element collocation method (FECM)

Nasr Ghoniem, University of California LA, USA

Multiphysics-Multiscale Modeling of Severe-Environment Materials

Hua Li, Nanyang Technological University, Singapore

A Multiphysics Computational Modeling of Smart Soft Matters

Qing Li, University of Sydney, Australia

Majid Manzari, The George Washington University, USA

Verification and Validation of Numerical Methods in Geotechnical Earthquake Engineering



Catalin R. Picu, Rensselaer Polytechnic Institute Troy, NY, USA

Structure and mechanical behavior of self-organized fibrous materials

Giuseppe Rega, Sapienza University of Rome, Italy

Computational Issues in the Nonlinear Dynamics and Control of Macro/Micro-Mechanics

Elio Sacco, University of Naples Federico II, Italy

Computational modeling of masonry structures

Robert Skelton, University of California, San Diego, CA, USA

Building Tensegrity Structures in Space

Waiching Sun, Columbia University, NY, USA

A triple-scale discrete-continuum coupling method for path-dependent porous media enhanced by recurrent and recursive deep learning