

Proposta Minisimposio AIMETA 2019

"Theoretical, Numerical and Physical Modelling in Geomechanics: from the micromechanics of granular materials to geotechnical engineering applications"

Organized by:

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The aim of the workshop is to provide a forum to discuss the most recent developments in the broad field of modelling in geomechanics, including innovative theoretical approaches, numerical methods for geometric and material non-linear problems in mono- and multiphase porous media, and physical modelling on small-scale models under artificial gravity. The workshop is open to contributions encompassing granular mechanics at the microscale, multi-phase, multi-physics applications of continuum mechanics to the numerical modelling of geotechnical engineering problems at the macroscale and integrated approaches, based on the macroelement concept, for the description of soil-structure systems at the megascale. Applications to challenging geotechnical problems of recent developments in advanced numerical methods, such as IGA-FEM, MPM and SPH, are included as well as the current state of the art of static and dynamic centrifuge modelling of foundations, deep excavations, and slopes.