Solid mechanics

Session organizers

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Description

Application and development of numerical and computational techniques for the solution of solid mechanics problems in general, including the development of numerical tools for design optimization and simulation of manufacturing processes and engineering problems in general. Development of innovative approaches to traditional problems or use of existing methods for solving new problems. Main topics of interest (not exclusive): Numerical modeling of linear and nonlinear homogeneous or heterogeneous solids under various types of actions, including mechanical stress, unconventional actions like explosions and degradation caused by harsh environments, chemical and thermal effects; Numerical modeling of large deformation problems, contact and impact; Numerical modeling of problems related to the use of new materials such as ceramics, composites and cellular and problems related to interfaces and adhesion in composite systems .