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FINITE-STRAIN PLASTICITY AND VISCOELASTICITY: MODELLING APPROACHES AND NUMERICS

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ABSTRACT

Over the last decade, novel modelling approaches and corresponding computational techniques have substantially contributed to the computer simulation of materials undergoing inelastic deformations. The development has fostered the insight that models and algorithms are intimately related. The main goal of this minisymposium is to discuss the state-of-the-art, the cutting edges and the future of modelling and numerics of inelasticity at finite strains. In particular, the exchange between researchers studying plasticity/viscoplasticity, creep, and viscoelasticity shall be stimulated. The minisymposium equally includes purely phenomenological and physics-based models. Talks devoted to advanced or problem-adapted numerical schemes, which ensure and improve accuracy, efficiency and stability of computations, are highly welcome, cf. [1-3].

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