NUMERICAL ANALYSIS OF PARTIAL DIFFERENTIAL EQUATIONS IN CONTINUUM MECHANICS AND ELECTROMAGNETISM

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ABSTRACT

This minisymposium aims to gather new theoretical and applied developments concerning the utilization of finite elements and related techniques to solve diverse boundary value problems and initial-boundary value problems arising in continuum mechanics. The above refers to source problems as well as to corresponding eigenvalue problems. Besides the classical finite element methods, we expect contributions involving relatively recent approaches such as *Discontinuous Galerkin, Local Discontinuous Galerkin, Hybridized Discontinuous Galerkin, and Virtual Finite Elements,* including a priori and a posteriori error analyses of the respective procedures. In turn, among the different application areas, we particularly welcome works dealing with models from fluid mechanics, elasticity, fluid-solid interactions, and electromagnetism.