ADVANCES IN NUMERICAL METHODS FOR SOLUTION OF PDE

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ABSTRACT

The objective of this symposium is to discuss new advances in numerical methods for linear and non-linear time-dependent and time-independent partial differential equations used in mechanics. Topics of interest include, but are not limited to: new space and time discretization methods; high-order accurate methods with conforming and unfitted meshes including finite, spectral, isogeometric elements, finite difference methods, fictitious domain methods, meshless methods, and others; special treatment of boundary and interface conditions on irregular geometry; new time-integration methods; adaptive methods and space and time error estimators; comparison of accuracy of new and existing numerical methods; application of new numerical methods to engineering problems; and others.