

Higher Order Finite Element Discretizations

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The meeting will be devoted to the general area of higher order Finite Element (FE) discretizations with applications to Engineering and Science. Sample subjects include (but are not limited to...):

- Innovative discretization techniques allowing the use of higher order discretizations: exact sequences, stabilization techniques, least squares, Discontinuous Galerkin and Discontinuous Petrov- Galerkin methods.
- A-posteriori error estimation and adaptivity including goal-oriented adaptivity.
- Preconditioning and iterative solvers.
- FE technology: construction of shape functions, data structures, fast integration techniques.