Department of Mathematics

University of Houston

Scientific Computing Seminar

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Mixed Finite Element Method with Piece-wise Constant Fluxes for Diffusion Equations

Thursday, Sep. 20, 2012 3:00 PM- 4:00 PM Room 646 PGH

Abstract:

In this presentation, we consider a new approach to the discretization of the diffusion equations on polygonal and polyhedral meshes by the nonconforming mixed finite element method. The method is not conforming due to the fact that the finite element vector functions in the space of fluxes are piece-wise constant. In special cases we prove the error estimates. Numerical results will be given.

This seminar is easily accessible to persons with disabilities. For more information or for assistance, please contact the Mathematics Department at 743-3500.