Computational Mathematics Seminar Series

A Posteriori Error Estimates of Discontinuous Galerkin Methods for Elliptic Obstacle Problems

Kamana Porwal, LSU Department of Mathematics and CCT

Postdoctoral Researcher

Digital Media Center 1008B
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Abstract:

In this talk I will present a posteriori analysis for various discontinuous Galerkian (DG) methods for the obstacle problem. A nonlinear smoothing function mapping from DG finite element space to CG finite element space plays an important role in the analysis. Using a key property of DG methods we have performed analysis is a unified frame work. We have further simplified a posteriori error estimator with a mild assumption on the trace of the obstacle. Finally, numerical results demonstrating the performance of the estimator are presented.

Speaker's Bio:

Postdoc at CCT, 2014.
PhD (2014) from Indian Institute of Science Bangalore, India

This lecture has a reception @ 03:00 pm

Center for Computation & Technology
2003 Digital Media Center • Telephone: +1 225/578-5890 • Fax: +1 225/578-8957