Department of Mathematics

University of Houston

Scientific Computing Seminar

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Finite element methods for high contrast interface problems

Thursday, March 17, 2016
1:30 PM- 2:30PM
Room 646 PGH

Abstract: We present two different finite element methods for second order elliptic problems with interfaces. The difficulty in approximation solutions of these problems is that solutions are not smooth across the interface. One approach is to refine the mesh near the interface. Another approach is to work on a fixed method that is not aligned with the interface and modify the standard method. We take the second approach as this is more appropriate for time dependent problems where the interface moves.

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