

Announcing

**COS Graduate Seminar
February 10, 2006 at 2:00 pm
Southern Hall 303**

at The University of Southern Mississippi

Speaker: Alexander Cheng

Department of Civil Engineering
The University of Mississippi

Title: Methods of Collocation, Trefftz, and Fundamental Solutions for Solving Well-Posed and Ill-Posed Boundary Value Problems of PDEs

Abstract:

What do collocation methods, Trefftz methods, and the method of fundamental solutions have in common? These methods are all based on global basis functions which are highly continuous (as oppose to piecewise continuous low degree polynomials of FEM and FDM), are meshless (compared to FEM and FVM mesh), enjoy exponential error convergence (compared to algebraic convergence of all methods except for spectral methods), and adapt to arbitrary geometry (compared to the restricted geometry of spectral methods).

In this talk, it will be shown that these “collocation methods” can solve ill-posed as well as well-posed problems in ONE STEP, without iteration!

Further Information

Refreshments are served from 1:50 pm until 2:00 pm in Southern Hall 303.