



Announcing

**A Colloquium Presentation
October 23, 2008 at 2:00 pm
Southern Hall 303**

at The University of Southern Mississippi

Speaker: Qin Sheng

Department of Mathematics
Baylor University

**Title: From calculating a matrix exponential function
to parallel-split computations**

Abstract:

This talk concerns the splitting methods for the numerical integration of ordinary and partial differential equations (ODEs). Splitting methods arise when a vector field can be split into a sum of two or more parts that are each simpler to integrate than the original. One of the main applications of splitting methods is in geometric integration, which may involve evaluations of matrix exponentials.

This talk will start from the different ways of computations of a matrix exponential, and extend the discussions to modern splitting and parallel algorithm designs. All students are welcome!

Further Information

Refreshments are served from 1:45 pm until 2:00 pm in Southern Hall 303. Further details and information about this and other departmental activities is available online at http://www.math.usm.edu/bulletin_board/.