

CALIFORNIA STATE UNIVERSITY, LONG BEACH

# THE MATHEMATICS COLLOQUIUM

presents

Dr. Stephen A. Book

Chief Technical Officer, MCR

**speaking on**

*Generating Prediction Bounds for Regression Functions by  
Bootstrap Sampling*

**Friday, November 4, 2005**

**12:00PM-1:00PM**

**FO3-200A**

**Contents:**

1. The Problem and Its History
2. Classical Linear Regression (Ordinary Least Squares)
3. The General Nonlinear Situation and Iteratively Reweighted Least Squares
4. The Bootstrap Method of Statistical Sampling
5. Using Bootstrap Sampling to Derive Confidence Bounds
6. Summary