SAMSI/CRSC Undergraduate Workshop  
May 21 - May 26, 2006  
www.ncsu.edu/crsc/ugw06

Sunday, May 21

7:00 Welcoming Reception in Sullivan Hall

Monday, May 22

8:30 Meet participants at Sullivan Hall. Transport to SAMSI.
9:10 Introduction to SAMSI, followed by presentations from current SAMSI programs.
9:15 National Defense and Homeland Security (ANJELA GOVAN)
10:00 Financial Mathematics (DR. JESUS RODRIGUEZ & DOUG VESTAL)
10:45 Break
11:00 Astrostatistics (FLOYD BULLARD)
11:45 Lunch at SAMSI
12:30 Vans transport participants to Harrelson Hall.
1:15 Introduction and Background (DR. RALPH SMITH)
1:45 Introduction to the Forward Problem: Solving the Harmonic Oscillator System  
(DR. SAVA DEDIU)
2:45 Break—Refreshments/Drinks available in HA 243
3:00 Brief Introduction to the Computing System and MATLAB (DOUG VESTAL)
4:30 Vans take participants to Lake Crabtree
5:00 Dinner at Lake Crabtree

Tuesday, May 23

9:00 Linear Inverse Problems: A MATLAB Tutorial. (JENNIFER SLOAN)
10:45 Break—Refreshments/Drinks available in HA 243
11:00 Basic Statistical Concepts and Some Probability Essentials (SHENEK HEYWARD)
12:15 Lunch
1:15 Introduction to Statistical Inference (FLOYD BULLARD)
2:45 Break—Refreshments/Drinks available in HA 243
3:15 Statistical View of Linear Least Squares: A MATLAB Tutorial. (JOYEE GHOSH)

**Wednesday, May 24**

8:45 Vans transport participants from Sullivan Hall to Centennial Campus
9:00 Rotating Sessions
   - Vibrating beam Data Collection at CRSC Laboratory. (JOHN DAVID AND DR. RALPH SMITH)
   - Graduate School Panel
     - DR. KIM WEEMS, STATISTICS DEPARTMENT, NCSU
     - DR. ERNIE STITZINGER, MATHEMATICS DEPARTMENT, NCSU
   - Career Panel
     - DR. KEVIN ANSTROM, DUKE CLINICAL RESEARCH INSTITUTE
     - DR. EMILY LADA, SAS
     - DR. LAURA POTTER, GLAXOSMITHKLINE
12:00 Lunch
1:00 Reflection on the Data Collection and Modeling Experiences (DR. LISA DENOGEAN & DR. MOUSTAPHA PEMY)
2:15 Break—Refreshments/Drinks available in HA 243
2:30 Solving the Vibrating Beam: Inverse Problem (ARTHUR SINKO)
3:00 Solving the Vibrating Beam: Optimization (ANJELA GOVAN)
4:00 Teams Work on Inverse Problem (All)

**Thursday, May 25**

9:00 Statistical Analysis for the Vibrating Beam Inverse Problem (SE HEE KIM & LINGSONG ZHANG)
10:00 Break—Refreshments/Drinks available in HA 243
10:15 Alternative Beam Model (DR. RALPH SMITH)
11:15 Teams Work on Inverse Problem (All)
12:30 Lunch
1:30 What could we do better? Alternative models/statistical methods (DR. LISA DENOGEAN & DR. CURTIS STORLIE)
2:30 Break–Refreshments/Drinks available in HA 243
3:00 Teams Work on Inverse Problem; Begin to Prepare Reports (ALL)
5:00 Participants Return to Sullivan Hall; Get Dinner
6:30 Bowling

**Friday, May 26**

9:00 Presentations and Discussion (ALL)
10:30 Break–Refreshments/Drinks available in HA 243
10:45 Presentations and Discussion (ALL)
11:45 Closing Remarks & Workshop Evaluation (Dr. Ralph Smith)
12:00 Lunch
1:00 Participants Depart for Home