

# **MORE Science at UTSA**

## **Environment Science and Engineering**

### **Fall 2006 Seminar Series**

**Where: HSS 3.03.14**

**When: 4:00 PM – 5:00 PM on September 15, 2006**

**Snack and drinks will be served**

**Speaker: Dr. Srinivas Bettadpur**



Dr. Srinivas Bettadpur is a Senior Research Scientist at the Center for Space Research at The University of Texas at Austin. He is responsible for the science data analysis and science operations for the NASA/DLR GRACE mission. His research interests are satellite geodesy, and the application of space-based remote sensing to geodynamic and geodetic applications. Before working on GRACE, he has done research in the application of precision orbit determination methods to Earth gravity field and Earth orientation determinations.

**Topic: The Gravity Recovery And Climate Experiment (GRACE):  
Status & Future**

GRACE is a cooperative, NASA/DLR mission for the precise mapping of the gravity field of the Earth. The science motivation for this mission is that the mass transport within the Land, Ocean and Atmosphere can be measured through the resulting changes in the exterior gravity field of the Earth. GRACE has been providing global measurements of the mass transport at monthly time scales since launch in March 2002. The results have been applied to a wide range of studies in oceanography, hydrology, glaciology and the solid Earth sciences.

This presentation reviews the GRACE mission concept, and describes its evolution since launch, as well as anticipated future plans. A survey of the science results is presented, with particular attention to the lessons learnt so far in developing GRACE product applications. A brief discussion of possible future improvements in the interpretation of the data will also be presented.