

Department of Statistics

BROWN BAG LECTURE SERIES

11:30-12:30 • WEDNESDAY, NOV 18TH • ROOM 503, BLOCKER



Guest Speaker:

Jun, Mikyoung

Assistant Professor

Department of Statistics

Texas A&M University

Seminar: Nonstationary Covariance Models for Processes on a Sphere

With the advance of science and technology, it is common in geophysical and environmental problems to have data that cover large portion of the Earth. Many of these physical processes exhibit strong nonstationarity in space, in particular with respect to latitude. Often times these global data sets are of very large dimension and this poses a computational challenge.

In this talk, she will discuss issues with valid covariance models for processes on a sphere and introduce some methods of developing valid covariance models that are flexible to capture the kinds of nonstationarities that many geophysical processes have. Some computational methods for efficient calculation of the large covariance matrices will be presented. She will also talk about some approaches for multivariate processes on a sphere, especially how to model the cross covariance structure of multiple global processes. Some applications to ozone data and climate problems will be given.

History: Mikyoung Jun received her BS degree from Seoul National University in 1999 and continued her study in Master's program of the university. Then she obtained her PhD degree from the University of Chicago in summer 2005. She joined the department of statistics at Texas A&M University in fall 2005 and also spent 6 months in 2005 at the National Center for Atmospheric Research in Boulder, CO as a visiting scientist.

THE DEPARTMENT OF STATISTICS BROWN BAG SEMINAR IS A GREAT OPPORTUNITY FOR STUDENTS TO HEAR FROM THEIR PROFESSORS & ALUMNI ABOUT CURRENT RESEARCH GOING ON IN THE DEPARTMENT & INDUSTRY. WE WILL HAVE PIZZA AND DRINKS FOR ALL WHO ATTEND! HOPE TO SEE YOU THERE!