DEPARTMENT OF STATISTICS AND BIOSTATISTICS

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Analyzing Spatial Data Locally

March 23, 2016
3:20 – 4:20pm
Light refreshments will be served
110 Frelinghuysen Road
Hill Center, Room 552

Abstract: Stationarity is a common assumption in spatial statistics. The justification is often that stationarity is a reasonable approximation if we focus on spatial data "locally." In this talk we first review various known approaches for modeling nonstationary spatial data. We then examine the notion of local stationarity in more detail. In particular, we will consider a nonstationary model whose covariance behaves like the Matérn covariance locally and an inference approach for that model based on gridded data.

Bio: Tailen Hsing received his PhD in Statistics from the University of North Carolina. He is currently at the Department of Statistics of University of Michigan. His research interests include extreme value theory, functional and spatial data, probability and times series. He has a new book, published by Wiley, titled "Theoretical Foundations of Functional Data Analysis, with an Introduction to Linear Operators".