MICHIGAN STATE UNIVERSITY
Department of Statistics and Probability

COLLOQUIUM

Stefano Castruccio
University of Notre Dame

Non-Gaussian Spatio-Temporal Models for Modeling Uncertainty in Wind Energy

Tuesday, February 26, 2019
10:20 AM - 11:10 AM
Refreshments 10:00 AM
C405 Wells Hall

Abstract

During this talk, I will present a collection of statistical models aimed at capturing wind fields at different spatial and temporal scales. The work is motivated by the need to provide Saudi Arabia with an assessment of this renewable resource in the country, and to quantify its uncertainty under different configurations of a climate model. In this talk I will span through different spatial scales, from global to local, and will discuss different approaches for different scientific investigations, from global trans-Gaussian to bi-resolution skew-t processes, as well as their relative merits at different resolutions. Towards the end of the talk, I will also discuss implications on visualization and present simulations results using some apps in stereoscopic view freely available for smartphones.

To request an interpreter or other accommodations for people with disabilities, please call the Department of Statistics and Probability at 517-355-9589.