

STP598 Spatiotemporal Analysis

This course focuses on modern techniques in analyzing spatiotemporal data. It consists of two major parts: spatial statistics and time series. The topics will include spatial process, areal data models, hierarchical spatial modeling, time series regression, ARMA/ARIMA models, spectral estimation, and state-space models.

Enroll requirements: STP421, STP 427

Text books:

1. Hierarchical Modeling and Analysis for Spatial Data, by Sudipto Banerjee, Bradley P. Carlin, Alan E. Gelfand
2. Time Series Analysis and its applications, with examples in R, by Shumway & Stoffer