



**Summer Program on Transportation Statistics**  
**August 14-18, 2017**

**Lecture: *Dynamic Modeling and Prediction Approaches for Sparse Spatial and Temporal Data***

**Speaker:** Nalini Ravishanker

**Abstract:**

This talk will review dynamic modeling and prediction for temporal and spatio-temporal data and describe algorithms for suitable state space models. Use of dynamic models for modeling crash types by severity will be briefly illustrated. Extension of these approaches for handling irregular temporal spacing and spatial sparseness will be discussed, and a potential application to travel time prediction will be explored.