



Hamilton Institute

Multivariate Time Series Analysis in Neurology

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Nowadays, data are recorded with increasing spatio as well as temporal resolution. This calls for new methods to analyze these data sets. Caused by the high spatio as well as temporal resolution of the recorded signals, inference of the causal network structure underlying them becomes feasible. In many applications a detailed analysis of these networks allows deeper insights into the normal functioning or malfunctioning of the system. In Neurology this helps to understand certain diseases like epilepsy or Parkinson's disease.

Novel concepts to analyze multivariate data consisting of both time series as well as point processes will be presented. By means of an application to tremor in Parkinson's disease, the abilities and limitations of these techniques are discussed.

Venue: Seminar Room, Hamilton Institute, Rye Hall, NUI Maynooth

Time: 2.00 - 3.00pm (followed by tea/coffee)

Travel directions are available at www.hamilton.ie

