

NORTHWESTERN INSTITUTE ON COMPLEX SYSTEMS PRESENTS

Wednesdays

@NICO



Statistical Modeling of Graph Theoretic Data in Systems Biology

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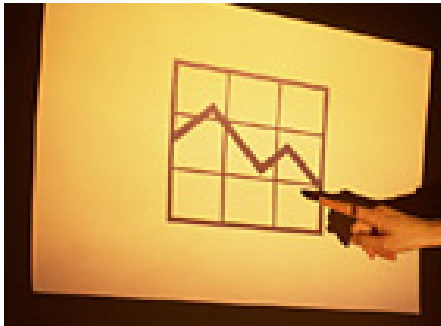
Wednesday, April 8, 2009

12:00 - 1:00 PM

(Refreshments served at 11:45 AM)

Chambers Hall, 600 Foster Street

Lower Level Classroom



Node-and-edge graphs are a foundational structure for recording, visualizing and analyzing high-throughput genomics and proteomics data. Like most data, systems biology observations generated by high-throughput technologies are subject to measurement error and therefore must be treated accordingly. Frequently reported summary statistics for these data often fail to account for experimental design and the stochastic nature of the observations. We apply classic statistical modeling approaches for a variety of problems, thereby improving inference on commonly reported graph statistics, local features of interest in global graphs, and plausible error probability bounds.

NICO Coffee Hour will follow for questions, networking, and collaboration.

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