

The Math/Stats Colloquium Department of Mathematics and Statistics San José State University



Elizabeth Gross

Statistical network models

OCTOBER 1, 2014, MH320

Abstract: When using statistical models for network data, we would like to know how well the model fits the data, or in other words, the "goodness-of-fit" of the model. This question has proved particularly challenging even for relatively simple classes of network models, as it currently requires sampling graphs with the same sufficient statistics (e.g., number of edges, number of triangles, degree sequence, etc) as the observed network. In this talk, we will discuss the challenges to goodness-of-fit testing for network models and the connection between goodness-of-fit testing and computational algebraic geometry.

Background: One semester abstract algebra.

About the speaker: Dr. Elizabeth Gross is an Assistant Professor in the Department of Mathematics at SJSU. Her interests include algebraic statistics, applied algebraic geometry, and network analysis. She received her Ph.D. from the University of Illinois at Chicago in 2013.

SNACKS IN MH331B AT 2:30 PM
TALKS START AT 3 PM

For more information, see our full schedule at:

http://www.math.sjsu.edu/~hsu/colloq/