



NIMBioS

National Institute for Mathematical
and Biological Synthesis



NIMBioS Interdisciplinary Seminar **3:30 p.m.*, Tuesday, September 8, 2015**

Dr. Nels Johnson
NIMBioS Postdoctoral Fellow

“Nonparametric Bayesian functional equivalence models for community data”

Ecological community data frequently contain large numbers of sparsely observed species. Reducing the number of species used in a community analysis can make model estimation and interpretation much easier. However, choosing this reduction is non-trivial. Important species can be left out of the analysis or combined inappropriately. We introduce a nonparametric Bayesian model to simultaneously learn about the groups of functionally equivalent species and the corresponding parameter values of each group for describing an ecosystem function. We motivate this work using a community of methane-consuming soil-bacteria from across the North American Great Plains.

Location: Hallam Auditorium, Room 206 at NIMBioS, Claxton Education Bldg, 1122 Volunteer Blvd.

**Join us for refreshments at 3 p.m.*

The National Institute for Mathematical and Biological Synthesis (NIMBioS) brings together researchers from around the world to collaborate across disciplinary boundaries to investigate solutions to basic and applied problems in the life sciences. NIMBioS is sponsored by the National Science Foundation with additional support from The University of Tennessee, Knoxville

