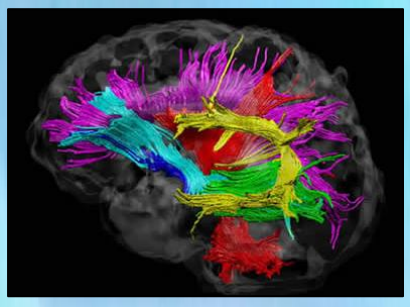
NIMBioS
National Institute for Mathematical and Biological Synthesis



Neurobiology of Expertise

A NIMBioS Investigative Workshop

March 11-13, 2015
NIMBioS at the Univ. of Tennessee, Knoxville

Network sciences and complex systems theory provide exemplar mathematical formalisms to approach the analysis of multimodal and highly complicated neuroscience datasets. This investigative workshop aims to synthesize these and other state of the art applications of mathematics in order to systematize and unify multidisciplinary and multiscale work on expert human performance. The workshop will bring together researchers from multiple disciplines in order to better understand the existing mathematical challenges and explore new directions in modeling genomic to behavioral signatures of performance in humans and animal models for perceptual, motor and analytical expertise domains. Workshop goals are to identify challenges and frontiers in mechanistic modeling, prediction, signal processing and machine learning as well as novel neurotechnologies for data acquisition in order to facilitate uncovering the underlying neural mechanisms of expertise.

Participation in the workshop is by application only. Individuals with a strong interest in the topic are encouraged to apply, and successful applicants will be notified within two weeks of the application deadline. If needed, financial support for travel, meals, and lodging is available for workshop attendees.

Application deadline: December 15, 2015

For more information about the workshop and a link to the online application form, go to http://www.nimbios.org/workshops/WS_expertise

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, through NSF Award #DBI-1300426, with additional support from The University of Tennessee, Knoxville.

NSF

The University of Tennessee Knoxville