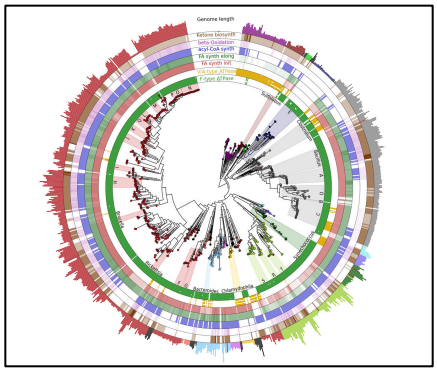
NIMBioS

National Institute for Mathematical and Biological Synthesis



Pan-microbial Trait Ecology

A NIMBioS Investigative Workshop

June 14-16, 2017

NIMBioS at the Univ. of Tennessee, Knoxville

This workshop aims to lay the groundwork for a mechanistic trait-based framework for different microbial taxa by combining several fundamental fields, from genomics and metabolic modeling to community ecology and ecosystem modeling. We will identify key traits that can be used in community and ecosystem models and outline ways to derive such traits from known microbial genomes and metabolic networks. We will explore several biological and computational challenges within this topic, such as linking cellular metabolism to phenotypic traits, developing multidimensional models, reducing model complexity, modeling trait evolution at different levels and expanding metabolic models to the level of microbial communities. The workshop will bring together a highly interdisciplinary and diverse group of researchers at different stages of their careers, including applied mathematicians, computational microbial biologists, community ecologists and ecosystem scientists.

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: March 26, 2017

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

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.

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