



NIMBioS

National Institute for Mathematical
and Biological Synthesis



Morphological Plant Models *A NIMBioS Investigative Workshop*

September 2-4, 2015
NIMBioS at the Univ. of Tennessee, Knoxville

This workshop aims to set new frontiers in combining plant phenotyping with recent results from shape theory at the interface of geometry and topology. The mathematical/computational focus will be to identify current cutting edge techniques to analyze, model, and describe plants from the cell to the organ level and identify mathematical challenges in plant science applications. The biological focus will be on how biologists can develop datasets and provide perspectives to establish simple model systems that employ favorable mathematical and technological constraints to discover special cases for later generalization. The scientific goal is to develop a suite of biological questions that allow participants to jointly pioneer the use and development of geometric and topological methods within the plant sciences. The synergy provided from uniting these disparate disciplines will potentially fuel future collaborations and hasten new studies and perspectives in plant phenotyping.

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: June 29, 2015

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

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.

