

## Mathematical approaches to improve modeling and decisions for agricultural problems

Organizers:

Dieter Armbruster, Arizona State University

Nina Fefferman, University of Tennessee

May 5 and 6, 2017 at NIMBIOS, U. of Tennessee, Knoxville

### Agenda

- May 4, Evening: Arrival in Knoxville
- May 5,
  - 8:00 Coffee and light breakfast-y things
  - 8:40 Welcome to NIMBIOS
  - 8:50 Introduction (Armbruster/Fefferman)
  - 9:00 An Introduction to Seed Selection (Nicolas Martin, Syngenta)
  - 10:00 Genetics Data Analysis at Syngenta (Chris Basten, Syngenta)
  - 11:00 Coffee Break
  - 11:30 Some initial observations on building predictive models for soybean yield (Esma Gel, Arizona State University)
  - 12:30 Lunch at NIMBIOS
  - 1:30 Seed Stocking Via Multi-Task Learning and Two-Step Allocation (Yunhe Feng and Wenjun Zhou, University of Tennessee)
  - 2:00 Four fifteen minutes presentation on research potentially related to this workshop (Kirby, Fefferman, Hughes-Oliver, Beavis)
  - 3:00 Coffee Break
  - 3:20 Open session to introduce everybody and their expertise
  - 3:45 Two parallel working groups:
    - W1: Forecasting (lead: Fefferman, note taker: )
    - W2: Decision theory and Optimization (lead: Armbruster, note taker: )
  - These groups are open ended but we expect that they finish around 5 - 5:30pm.
  - 5:30 Reception
    - Dinner on your own

- May 6

8:30 Coffee and light breakfast-y things

9:00 Discuss the forecasting group's ideas in a plenary meeting

9:45 Discuss the Decision theory group's ideas in a plenary meeting

10:30 Coffee Break

10:50 Two parallel working groups:

W3: Data availability (lead: Beavis, note taker: )

W4: Potential continuation of this workshop - Funding/Publication/Networking issues (lead ?, note taker: )

12:00 Plenum to summarize W3 and W4

1:00 Box Lunch and open ended discussion