



Conference Announcement

Collective dynamics and model verification: Connecting kinetic modeling to data

April 17-19, 2015

School of Mathematical and Statistical Sciences
Arizona State University

Organizers

Dieter Armbruster	Arizona State University
Daniel Brinkman	Arizona State University
Sébastien Motsch	Arizona State University
Christian Ringhofer	Arizona State University

Confirmed Participants

Nicole Abaid	Virginia Tech
Gil Ariel	Bar Ilan University
Alethea Barbaro	Case Western Reserve University
Spring Berman	Arizona State University
Audrey Dussutour	University of Toulouse III, CNRS
Irene M. Gamba	University of Texas at Austin
Simon Garnier	NJIT and Rutgers University
Cory Hauck	ORNL and University of Tennessee
Reinhard Illner	University of Victoria, Canada
Shi Jin	University of Wisconsin-Madison
Yannis Kevrekidis	Princeton University
Pedro Lowenstein	University of Michigan
Richard Mann	ETH Zurich
Nicholas Ouelette	Yale University
Theodore P. Pavlic	Arizona State University
Benedetto Piccoli	Rutgers University-Camden
Maurizio Porfiri	New York University
William Romey	SUNY Potsdam
Andrey Sokolov	Argonne National Lab
Eitan Tadmor	University of Maryland
Victor Yakovenko	University of Maryland

Scientific Background

This workshop plans to critically examine swarm models in the face of data. Some of the questions we plan to discuss are:

- What is the data situation for swarms - what data are available, what are the important questions for the experimentalists, how far have they been answered?
- In what sense can we verify or falsify swarm models?
- What are the observables that allow us to discriminate different swarm models to determine which one fits a particular scenario better?
- When and in what sense can swarm models predict transient behavior?

Goals

We plan to bring together researchers in kinetic theory, mathematical modelers, physicists, social scientists and biologists, engineers and computer scientists that are interested in data driven models with predictive power.

We hope the workshop will help to focus this research community on future new directions that go beyond qualitative analogies to involve more quantifiable predictions.

A limited number of openings are available.

To apply, complete the online application before
February 15, 2015.

For more information and to apply:

www.ki-net.umd.edu

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