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

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Cory Hauck	ORNL and University of Tennessee
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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 it 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