



**KI-Net:** Kinetic description of emerging challenges  
in multiscale problems of natural sciences

An NSF Research Network in Mathematical Sciences



## Workshop Announcement

# Kinetic Description of Social Dynamics: From Consensus to Flocking

## November 5-9, 2012

Center for Scientific Computation And Mathematical Modeling (CSCAMM)  
University of Maryland, College Park

### Organizers

<b>Irene Gamba</b>	University of Texas at Austin
<b>Pierre-Emmanuel Jabin</b>	University of Maryland
<b>Shi Jin</b>	University of Wisconsin-Madison
<b>Christian Ringhofer</b>	Arizona State University
<b>Eitan Tadmor</b>	University of Maryland

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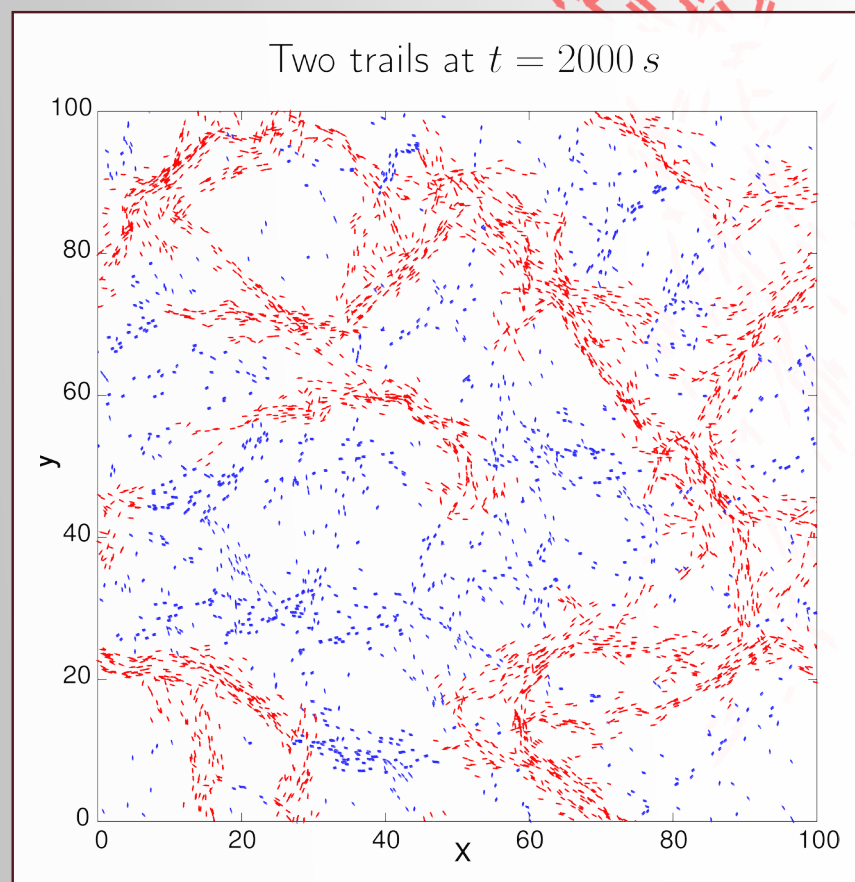


Image courtesy of Sébastien Motsch

### Scientific Background

The dynamics of many social and economic networks are described by multi-agent models, in which each participant interacts with the others according to certain deterministic or stochastic rules. The underlying topology of those interactions is not necessarily Euclidean, but governed by a graph, reflecting the fact that agents react to local gradients around them rather than to a given state. Continuum approaches based on kinetic description and coupled with fluid theory provide new insights by bypassing the difficulties related to the discrete nature of such networks.

**A limited number of openings are available.**  
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