Scientific Background

The meeting will focus on the passage from particle, networks, and agent-based models to macroscopic systems connected through kinetic descriptions with applications to transport phenomena, diffusion, mixing, and self-organization. The interplay between modeling, analysis, and computation of such systems can be used to understand the emergence of ordered structures out of microscopic interactions. The workshop will cover several applications at different scales to physical, social, and biological phenomena as well as connections to machine learning and data processing.

Goals

To bring together young researchers working in kinetic theory and related fields, to exchange ideas, and to facilitate collaborations.

A limited number of openings are available. To apply, complete the online application before September 14, 2018.

For more information and to apply: www.ki-net.umd.edu

Clustering algorithm in abstract graphs using collective dynamics by A. Griffin and J. Morales