KI-Net Conference Schedule - Iowa State University

Time Thursday, March 23, 2017 Memorial Union Cardinal Room

8:30am Shuttle #1 leaves Gateway 8:50am Shuttle #2 leaves Gateway

8:45-9:15am Registration (Memorial Union Cardinal Room)

Coffee Service - Muffins

9:15-9:30 Opening Remarks - Dean Beate Schmittmann ISU College of Liberal Arts & Sciences

9:30-10:10am Pierre Degond Imperial College London

Coarse-graining of collective dynamics models

10:10-10:50am Alethea Barbaro Case Western Reserve University

Phase transition in a model for territorial development

10:50-11:10am Break

11:10-11:40am Hui Yu RWTH Aachen

Boundary interaction of the Vicsek model and its hydrodynamic model

11:40am-12:10pm Da-Jiang Liu DOE Ames Lab

Modeling of fronts and patterns at the atomistic level for surface reactions: CO-oxidation on metal(100)

surfaces

12:10-2:00pm Lunch (on your own)

2:00-2:40pm Eli Ben-Naim Los Alamos National Lab

Escape and finite-size scaling in reaction-diffusion processes

2:40-3:20pm Seung-Yeal Ha Seoul National University

Review on the progress of the classical and quantum synchronization

3:20-3:50pm Break/snacks

3:50-4:30pm James Evans Iowa State University, Physics

Non-equilibrium correlations in interacting-particle reaction-diffusion models with inhibited "stirring"

4:30-5:00pm Chanhui Tan Rice University

Asymptotic preserving schemes on kinetic models with singular limits

5:10pm Shuttle #1 leaves Memorial Union 5:30pm Shuttle #2 leaves Memorial Union

Dinner (on your own)

KI-Net Conference Schedule - Iowa State University

Time Friday, March 24, 2017 Memorial Union Gallery Room

8:50am Shuttle #1 leaves Gateway 9:10am Shuttle #2 leaves Gateway

9:00-9:30am Coffee Service/Coffeecake

9:30-10:10am Michael Herty RWTH Aachen

Model-Predicitive Control Strategies for Agent-Based Systems

Simultaneous determination of the free energy profile and the effective dynamics

10:50-11:10am Break/Group Photo Campanile Room

11:10-11:40am Zhongming Wang Florida International University

A free energy satisfying discontinuous Galerkin method for one-dimensional Poisson--Nernst--Planck

11:40am-12:10pm James Rossmanith Iowa State University, Math

Towards Efficient Multiscale Numerical Methods for Kinetic Models in Plasma Physics

2:00-2:40pm Alex Travesset Iowa State University, Physics

Self-assembly and dynamics of nanoparticle superlattices

2:40-3:20pm Bo Li UCSD

Multi-scale Modeling and Simulation of the Growth of Bacterial Colony with Cell-Cell Mechanical

3:20-3:50pm Break/Snacks

3:50-4:30pm Hailing Liu Iowa State University, Math

On selection dynamics with nonlocal competition

4:30-5:00pm Yongki Lee UC Riverside

Blow-up conditions for two dimensional modified Euler-Poisson equations

5:00-5:30pm Free Time

5:30-7:30pm Banquet Memorial Union Cardinal Room

7:30pm Shuttle #1 leaves Memorial Union 7:50pm Shuttle #2 leaves Memorial Union

KI-Net Conference Schedule - Iowa State University

Time Saturday, March 25, 2017 Memorial Union Gallery Room

8:20am Shuttle #1 leaves Gateway 8:40am Shuttle #2 leaves Gateway

8:30-9:00am Coffee Service/Rolls and Scones

9:00-9:40am Christian Ringhofer Arizona State

Asymptotically preserving numerical methods for large reaction diffusion systems with applications to solar

cell design.

9:40-10:20am Di (Richard) Liu Michigan State

Analysis and simulation of multiscale stochastic intracellular bio-chemical reacting networks.

10:20-10:40am Coffee Break

10:40-11:10am Gleb Zhelezov University of Arizona

Applications of Coalescing Interacting Particles to Chemotaxis Models.

11:10am-11:40pm Pedro Constantino University of Minnesota

Maximum Entropy Closure Scheme for Moment Equations of Stochastic Reaction Networks with Oscillatory

11:40am Conference Ends

12:00 noon Shuttle #1 leaves Memorial Union 12:20pm Shuttle #2 leaves Memorial Union