

Complexity and Emergence in Social and Biological Systems

Lectures

Tomás ALARCÓN
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Stochastic multiscale models of competition between cellular populations

Nicola BELLOMO
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Crowd dynamics

Hans MEINHARDT
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1. Biological pattern formation: local self-enhancement and long range inhibition as the driver
 2. Models for regeneration: reconciling pattern formation and growth
 3. If patterns destabilize themselves: generation of highly dynamic patterns by self-quenching
- patterns

Philip MAINI
(Oxford University, United Kingdom)

T.B.A.

Jorge PACHECO
(Universidade do Minho, Portugal)

Climate Change: Governance, Cooperation and Self-organization

Eitan TADMOR
(Maryland University, USA)

Flocking and consensus in collective dynamics

1. Agent-based models
2. Kinetic and hydrodynamic descriptions