

**NIMBioS Tutorial: Game Theoretical Modeling of Evolution in Structured Populations
Agenda**

Monday, April 25

8:00-8:45 Breakfast at NIMBioS

8:45-9:00 Welcome by Suzanne Lenhart, NIMBioS Associate Director for Education & Outreach

9:00-9:30 Introduction of tutors and participants (Organizers: M. Broom J. Rowell, J. Rychtar, J. Van Cleve)

9:30-10:45 Jonathan Rowell: Introduction to game theory

10:45-11:00 Coffee break

11:00- 12:00 Mark Broom: Evolutionary Graph Theory

12:00 -12:05 Group photo

12:05 1:00pm LUNCH

1:00-2:00 Mark Broom: General framework

2:00-3:15 Alun Lloyd: Modeling Novel Strategies for Controlling Mosquito-Borne Diseases

3:15-3:30 Coffee break

3:30-4:00 Jan Rychtar: Territorial Raider games and Machine learning algorithms

4:00 – 5:00 Jan Rychtar: Activity - writing Matlab codes for machine learning and territorial raider games

5:00-6:00pm Reception (light snacks provided by NIMBioS)

After 6: dinner on our own

Tuesday, April 26

8:00-8:45 Breakfast at NIMBioS

8:45-10:00 Paulo Shakarian: Diffusion in Social Networks

10:30-10:45 Coffee break

10:45-12:00 Sergey Gavrilets: Collective action problem in "us versus nature" and "us versus them" games

12:00-1:00 LUNCH

1:00-3:00 Jeremy Van Cleve: Multilevel selection and population genetics in structured populations

3:00-3:30 Coffee break

3:30-4:30 Jonathan Rowell: Spatially Structured Biological Games When Neither Players Nor Space Are Discrete

4:30-5:30 Jonathan Rowell: Activity – writing Matlab codes

After 5:30 dinner on our own

Wednesday, April 27

8:00-9:00 Breakfast at NIMBioS

9:00-10:30 Jan Rychtar: Activity - writing Matlab codes for machine learning and territorial raider games, part 2

10:30-10:45 Coffee break

10:45-11:45 Mark Broom: outlooks, application of the framework

11:45 – 12:00 final words and adjure

12:00 Lunch