

## **Report of NIMBioS short-term visit to Sergey Gavrilets**

By Ben Johannes

### **Public information**

During a three-day visit, Sergey (NIMBioS) and Ben (ICEA, Oxford) discussed two main topics: Which mechanisms and factors play a role in the origins and the solution of collective action problems in humans? And how to test formal mathematical models of such collective action problems with real world empirical data? Sergey elucidated the most important factors that he plans to incorporate in his models, and Ben provided an overview of available data and their limitations. In the time to come, Sergey will continue to develop mathematical models -with the types of available empirical data in mind- whereas Ben will collect matching data for his own database and from third party datasets -with the formal models in mind-. Once the models are ready and tested with real world data, the aim is to publish the results in leading scientific journals.

The participants were:

- Sergey Gavrilets of NIMBioS Institute, University of Tennessee, USA
- Ben Johannes of the Institute for Cognitive and Evolutionary Anthropology, Oxford University, UK