

## **Abstract**

Oberwolfach Workshop:

### **Reaction Networks and Population Dynamics**

Dates:

**18 June - 24 June 2017** (Code: 1725a)

Organizers:

**Ellen Baake, Bielefeld**  
**Tom Kurtz, Madison**  
**Carsten Wiuf, Copenhagen**

Reaction systems and population dynamics constitute two highly developed areas of research that build on well-defined model classes, both in terms of dynamical systems and stochastic processes. Despite a significant core of common structures, the two fields have largely led separate lives. It is the goal of the workshop to bring the communities together and emphasise concepts, methods, and results that have, so far, appeared in one area but are potentially useful in the other as well. Key topics will include the qualitative behaviour of the deterministic models, concepts and methods of (stochastic) ancestral processes and duality, spatial structures, methods of simulation and inference, and the relationship between the deterministic and the stochastic versions.