

Workshop on the Analysis of Population Models with Interaction: New Trends and Developments

Dedicated to the 60th birthday of Ellen Baake

Bielefeld (and online), 16.-17. September, 2021

Thursday, 16.09.2021

Session chair: Anton Wakolbinger

10:00 – 10:15: Opening

10:15 – 11:05: Frank den Hollander, Leiden University
Spatial populations with seed-bank.

11:10 – 12:00: Anita Winter, University of Duisburg-Essen
Self regulating branching populations under cell division

Session chair: Matthias Birkner

14:00 – 14:50: Paul Jenkins*, University of Warwick
Lessons from population genetics for computational statistics: genealogies of interacting particle systems used in Sequential Monte Carlo.

14:55 – 15:45: Martin Möhle, University of Tübingen
A restaurant process with a cocktail bar

Session chair: Steven Evans

16:40 – 17:30: John Wakeley*, Harvard University
Effects of introgression on two-locus gene trees within species trees.

17:30 – 18:00: Warren Ewens**, University of Pennsylvania:
Some (maybe unwanted) random thoughts about population genetics theory and its association with (a) prime numbers and permutations, (b) interesting numbers, and (c) physics.

* online talk, ** prerecorded talk.

Friday, 17.09.2021

Session chair: Frederic Alberti

09:00 – 09:50: Matthias Birkner, Johannes Gutenberg University of Mainz
An analogue of Haldane's formula when the variance asymptotically is infinite

Session chair: Martin Möhle

10:20 – 11:10: Meike Wittmann, Bielefeld University
Extinction vortices and minimum viable populations: Interactions between ecology and evolution and between different selection mechanisms

11:15 – 12:05: Anton Bovier, Bonn University:
Branching Brownian motion with social distancing

Session chair: Frank den Hollander

13:40 – 14:30: Reinhard Bürger, University of Vienna
The effects of epistasis and linkage on the invasion of locally beneficial mutations

14:30 – 15:20: Anton Wakolbinger, Goethe University Frankfurt
Genealogies in evolution: looking backward and forward