

# 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

09:30 – 10:00 : Welcome coffee & Registration

10:00 – 10:15 : Opening

*Session chair: Anton Wakolbinger*

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.*

12:00 – 14:00 : Lunch

*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.*

15:45 – 16:40 : Coffee break

*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.*

18:00 – 18:30 Closing

19:00 – Conference dinner at Rosenhof

\* 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.*

09:50 – 10:20 : Coffee break

*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.*

12:05 – 13:40 : Lunch

*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.*

15:20 – Farewell coffee