

SPIELE

Stochastic Processes in EvoLution and Ecology

Bath - Berlin - Frankfurt - Mainz - Warwick

Arno Siri-Jégousse, UNAM Mexico City

„The evolution and the genealogy of a self-similar population “

In this talk we will study Markovian measure-valued processes with the self-similar property, as population evolution models. A Lamperti-Kiu transform can be obtained for such processes, transforming them into Markov Additive processes (MAP) via a random time change, where the first coordinate is a Lévy process representing the logarithm of the total size, and the second coordinate is a probability-valued process representing the evolution of the renormalized population. In particular, we will focus on the special case where the second coordinate is a Λ -Fleming-Viot process, dual to the Λ -coalescent. This result generalizes and sheds a new light to celebrated connections between stable branching processes and Beta-coalescents established in Birkner et al. (2005). This is a joint work with Alejandro H. Wences (University of Toulouse).

Time: Monday, 21.10.24 – 4 P.M. CET

The lecture will be held in hybrid format, Room 711 gr., Robert-Mayer-Str. 10, 7th floor.

Interested? Link available from Jochen Blath

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