

Session Program

12-17 Jul 2026



**European Conference on Mathematical and Theoretical
Biology (ECMTB 2026)**

***Stochastic agent- and particle-based models in biology:
methods and analytical insights***

University of Graz

Wednesday 15 July

11:10

Stochastic agent- and particle-based models in biology: methods and analytical insights

Session | Location: University of Graz, 05.12 - HS

11:10-11:30 **Pattern Formation and Spike Dynamics in the Presence of Noise**

Speaker

Chunyi Gai

11:30-11:50

Genealogical structures under interactive neutral reproduction: Ancestral influence graph and Frankenstein process

Speaker

Ellen Baake

11:50-12:10 **Structure of family trees in finite-population exchangeable models**

Speaker

Eric Foxall

12:10-12:30 **Dimension reduction for the modern Hopfield network**

Speaker

Linh Huynh

12:30

Thursday 16 July

10:40

Stochastic agent- and particle-based models in biology: methods and analytical insights

Session | Location: University of Graz, 05.12 - HS

10:40–11:00

Multi-type logistic branching processes with selection: frequency process and genealogy for large carrying capacities

Speaker

Marta Dai Pra

11:00–11:20

Multitype Lambda-coalescents: Characterisation and duality

Speaker

Noemi Kurt

11:20–11:40

Multi-Type Birth-Death Processes with Mean-Field Interactions for B-cell Phylodynamics

Speaker

Sebastian Hummel

11:40–12:00

Recurrent disease outbreaks and their frequency

Speaker

Theodore Kolokolnikov

12:00