

Session Program

12-17 Jul 2026



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

***Modeling Collective Dynamics in Heterogeneous Cell
Populations***

University of Graz

Tuesday 14 July

17:00

Modeling Collective Dynamics in Heterogeneous Cell Populations

Session | Location: University of Graz, 02.01 - HS

17:00–17:20

Life & death in a tight spot: how bacteria grow and confront their foes in crowded 3D environments

Speaker

Alejandro Martinez-Calvo

17:20–17:40

Multi-phase field approach towards modelling mechanical heterogeneity in tissues

Speaker

Aleksandra Ardaševa

17:40–18:00

Phenotype structuring in collective cell migration: a tutorial of mathematical models and methods

Speaker

Chiara Villa

18:00–18:20

A multiscale discrete-to-continuum framework for structured population models

Speaker

Eleonora Agostinelli

18:20

Wednesday 15 July

11:10

Modeling Collective Dynamics in Heterogeneous Cell Populations

Session | Location: University of Graz, 02.01 - HS

11:10–11:30 **Invasion patterns in heterogeneous cell populations**

Speaker

Carles Falco

11:30–11:50 **Understanding the role of space in modulating cellular heterogeneity**

Speaker

Paras Jain

11:50–12:10

A novel cellular automaton approach for modeling genotypic and phenotypic heterogeneity in cell systems

Speaker

Simon Syga

12:10–12:30 **Emergent chase-and-run dynamics in heterogeneous populations**

Speaker

Valeria Giunta

12:30