Session Program

12–17 Jul 2026

European Conference on Mathematical and Theoretical Biology (ECMTB 2026)

Mechanistic insights from in-vivo and in-vitro data: modelling tissue physiology and pathology away from equilibrium

University of Graz

Thursday 16 July

10:40

Mechanistic insights from in-vivo and in-vitro data: modelling tissue physiology and pathology away from equilibrium

Session | **Location:** University of Graz, 02.01 - HS

10:40–11:20

Collective cell dynamics driven by active boundaries and cell turnover: a multi-scale approach.

Speaker
Laurent Navoret

11:20–11:40 **Pattern formation in a phenotype-structured Shigesada-Kawasaki-Teramoto model**

Speaker
Davide Cusseddu

11:40–12:00 **A Starling resistor model for choroidal venous flow**

Speaker
Federica Vanone

12:00

15:10

Mechanistic insights from in-vivo and in-vitro data: modelling tissue physiology and pathology away from equilibrium

Session | **Location:** University of Graz, 02.01 - HS

15:10–15:30 **Active shape evolution in tissue mechanics**

Speaker
Naoufel Cresson

15:30–15:50 **Modelling the emergence of connective tissue architecture**

Speaker
Pauline Chassonnery

15:50–16:10 **A new size-dependant individual based model for epithelial tissue**

Speaker
Sophie Hecht

16:10–16:30

PDE models for the growth of heterogeneous cell populations: travelling fronts, sharp interfaces, and concentration phenomena

Speaker
Tommaso Lorenzi

16:30