

Session Program

12-17 Jul 2026



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

Differential modelling and numerics for human diseases

University of Graz

Thursday 16 July

10:40

Differential modelling and numerics for human diseases

Session | Location: University of Graz, 15.05 - HS

10:40–11:00

Global sensitivity-driven simplification and calibration of Cancer-on-Chip nonlocal integro-differential model

Speaker

Annachiara Colombi

11:00–11:20

An adaptive high-order polytopal method for modeling neuronal electrophysiology

Speaker

Caterina B. Leimer Saglio

11:20–11:40

A Thermodynamically Consistent Multiphysics Model of Irreversible Electroporation for Cutaneous Melanoma: Coupling GENERIC Thermo-Poromechanics with Tissue Electroporation

Speaker

Davide Baroli

11:40–12:00

A Data-Informed Agent-Based Model of Tuberculosis Granuloma-Like Structures

Speaker

Davide Moretti

12:00

15:10

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15:10–15:30

UQ analysis for cancer-on-chip experiments

Speaker

Laura Rinaldi

15:30–15:50

HDG-Based Discretization of a Mathematical Model for Multiple Sclerosis

Speaker

Micol Pennacchio

15:50–16:10

1D/2D Coupling of HDG discretizations for the simulation of Cancer-on-chip devices

Speaker

Silvia Bertoluzza

16:10–16:30

Numerical Study and Parameter Estimation on a Pressureless Euler-Type Model with Chemotaxis for Collective Cell Migration

Speaker

Tommaso Tenna

16:30