

**Session Program**

12-17 Jul 2026



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

***Inference, Calibration, and Sensitivity in Agent-Based Models:  
A Data-Centric View***

University of Graz

# Wednesday 15 July

11:10

## Inference, Calibration, and Sensitivity in Agent-Based Models: A Data-Centric View

Session | Location: University of Graz, 15.06 - HS

11:10–11:30

### From Sparse Data to Smart Decisions: Surrogate-Assisted Agent-Based Modeling for Regional Outbreak Response

Speaker

Carson Dudley

11:30–11:50

### Quantifying Uncertainty of ABM Parameters Using Explicitly Formulated Surrogate Models

Speaker

Kerri-Ann Norton

11:50–12:10

### Parameter-wise predictions and sensitivity analysis for random walk models in the life sciences

Speaker

Matthew Simpson

12:10–12:30

### Probabilistic Estimation of Agent Based Models using Hamiltonian Monte Carlo

Speaker

Benjamin Olsson

12:30