

**Session Program**

12-17 Jul 2026



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

***Social dynamics and behavioural interactions in infectious  
disease modeling***

University of Graz

## Thursday 16 July

10:40

### Social dynamics and behavioural interactions in infectious disease modeling

Session | Location: University of Graz, 15.02 - HS

10:40–11:00

#### Non-monotonic attack rates arising from risk-aware and imitation-driven behaviours during epidemics

Speaker

Prof. Gergely Röst

11:00–11:20

#### COVID-19 contact tracing provides insight into the fine-scale social interactions structure of England

Speaker

Prof. Jonathan M Read

11:20–11:40

#### The influence of human interactions on waterborne diseases: a reaction-diffusion model

Speaker

Dr Maria Francesca Carfora

11:40–12:00

#### A network model from sociodemographic heterogeneity to individual infection risk

Speaker

Dr Congjie Shi

12:00

15:10

### Social dynamics and behavioural interactions in infectious disease modeling

Session | Location: University of Graz, 15.02 - HS

15:10–15:30

#### Behaviour-driven epidemic phenomena in heterogeneous populations and networks

Speaker

Prof. Márton Karsai

15:30–15:50

#### Social Behaviour and Epidemic Dynamics: The Role of Imitation and Homophily

Speaker

Prof. Seyed M Moghadas

15:50–16:10

#### A Filippov Model Describing the Effect of Social Distancing in Controlling Infectious Diseases

Speaker

Prof. Stacey Smith?

16:10–16:30

#### Impact of Avoidant Behavior on Influenza Dynamics Under Low Vaccine Efficacy

Speaker

Prof. Thomas Vilches

16:30