

## Session Program

12-17 Jul 2026



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

*Mathematical and AI-enhanced computational models for  
sexually transmitted diseases and other public health threats*

University of Graz

## Tuesday 14 July

15:00

### Mathematical and AI-enhanced computational models for sexually transmitted diseases and other public health threats

Session | Location: University of Graz, 15.06 - HS

15:00–15:20

**Development of agent-based modelling of STI's: Can we use AI methods for improving implementation of partnership dynamics?**

Speaker

Mirjam Kretzschmar

15:20–15:40

**Early-warning signals for infectious diseases with a social-media compartment**

Speaker

Stacey Smith?

15:40–16:00

**Mathematical Modeling of Post-Infection Mortality and Transmission Structure: Implications for Persistent Infections and Public Health Dynamics**

Speaker

Zhisheng Shuai

16:00–16:20

**Qualitative impact of political and economic decisions on PrEP users under HIV epidemic control**

Speaker

Gregoire Ranson

16:20

17:00

### Mathematical and AI-enhanced computational models for sexually transmitted diseases and other public health threats

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**MS76-5**

17:20–18:00

**An agent-based platform for simulating the impact of chlamydia vaccine in the US population**

Speakers

Qi Deng, Edward Thommes

18:00–18:20

**Decision-making, epidemiological dynamics, individuals, and societies**

Speaker

Chadi Saad-Roy

18:20