

**Session Program**

12-17 Jul 2026



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

***Recent Development on Digital Twins for Biology and  
Biomedical Sciences***

University of Graz

# Thursday 16 July

17:00

## Recent Development on Digital Twins for Biology and Biomedical Sciences

Session | Location: University of Graz, 15.05 - HS

17:00–17:20 **Digital Twins of Morphogenesis**

Speaker

Mark Alber

17:20–17:40 **A Patient-Specific Digital Twin for Adaptive Radiotherapy of Non-Small Cell Lung Cancer**

Speaker

Jun Deng

17:40–18:00 **Machine Learning-Enabled Digital Twins for Personalized Modeling of Alzheimer's Disease**

Speaker

Wenrui Hao

18:00–18:20

**Integrating Multimodal Patient Data with Biophysical Models for Predicting Patient-Specific Tumor Progression**

Speaker

Parag Katira

18:20

# Friday 17 July

10:40

## Recent Development on Digital Twins for Biology and Biomedical Sciences

Session | Location: University of Graz, 15.05 - HS

10:40-11:00 **Developing a Digital Twin of the Maternal Brain**

**Speaker**

Sarah Kushne

11:00-11:20

**The mechanobiology of blood vessel formation: Towards a Digital Twin of Zebrafish intersegmental vessel formation**

**Speaker**

Roeland Merks

11:20-11:40

**The impact of ephaptic coupling and ionic electrodiffusion on arrhythmogenesis in the heart**

**Speaker**

Ning Wei

11:40-12:00 **Virtual dynamics of spatiotemporal single-cell interactions**

**Speaker**

Qing Nie

12:00