

**Session Program**

12-17 Jul 2026



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

***Stochastic Modelling for Inference with Gene Expression data:  
Methods and Applications***

University of Graz

## Tuesday 14 July

15:00

### Stochastic Modelling for Inference with Gene Expression data: Methods and Applications

Session | Location: University of Graz, 11.01 - HS

15:00–15:40

#### Integrating Single-Cell Experiments and Stochastic Models to Infer a Predictive, Mechanistic Understanding for Glucocorticoid Receptor Transport and DUSP1 mRNA Expression Dynamics

Speaker

Brian Munsky

15:40–16:00

MS160-01

Speaker

TBA

16:00–16:20

Predicting Single-Cell RNA Expression Variability from DNA Sequence and Epigenetics

Speaker

Andrew Nicoll

16:20

17:00

### Stochastic Modelling for Inference with Gene Expression data: Methods and Applications

Session | Location: University of Graz, 11.01 - HS

17:00–17:20

Statistical inference of chromatin- and transcription dynamics in living cells

Speaker

Christoph Zechner

17:20–17:40

#### When Trajectory Inference Fails: The Challenges of Inferring Dynamical Models from Single-Cell RNA-seq Data

Speaker

Meichen Fang

17:40–18:00

Deep learning for the Analysis and Reconstruction of Transcriptional dynamics from live-cell imaging data

Speaker

Muhan Ma

18:00–18:20

Quantifying the impact of cell division and size control on stochastic auto-regulatory gene expression

Speaker

Abigail Kushnir

18:20