

Session Program

12-17 Jul 2026



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

Mathematical Foundations of Biochemical Computing

University of Graz

Monday 13 July

15:00

Mathematical Foundations of Biochemical Computing

Session | Location: University of Graz, 11.03 - HS

15:00–15:20 **Reliable computing with reaction networks with unknown or variable rate constants**

Speaker
Badal Joshi

15:20–15:40 **Molecular Machines and the EM algorithm**

Speaker
Carsten Wiuf

15:40–16:00

Chemical mass-action systems as analog computers: implementing arithmetic computations at specified speed

Speaker
David Anderson

16:00–16:20 **Analog computation with transcriptional networks**

Speaker
David Soloveichik

16:20

17:00

Mathematical Foundations of Biochemical Computing

Session | Location: University of Graz, 11.03 - HS

17:00–17:20 **Limits of Equilibrium Computation in DNA Seesaw and Dimerization Networks**

Speaker
Ho-Lin Chen

17:20–17:40

Designing optimal computational networks: a case study from maximum likelihood estimation

Speaker
Oskar Henriksson

17:40–18:00

Recurrent neural chemical reaction networks: a versatile way of generating complex dynamics in chemical systems

Speaker
Tom Ouldridge

18:00–18:20

Computing with reaction networks at input-independent speed: exponential and logarithmic functions

Speaker
Tung Nguyen

18:20