

**Session Program**

12-17 Jul 2026



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

***Modeling of protein dynamics with applications to  
Neurodegenerative Diseases***

University of Graz

## Tuesday 14 July

15:00

### Modeling of protein dynamics with applications to Neurodegenerative Diseases

Session | Location: University of Graz, 15.12 - HS

15:00–15:20 **Mathematical models of brain networks: propagation of diseases and of brain activity**

Speaker

Dr Ahsish Raj

15:20–15:40 **Non-Linear Dynamics and Catalytic Exchange Govern Prion Assembly and Spreading**

Speaker

Dr Human Rezaei

15:40–16:00 **A perinuclear crown of proteins as a biomarker for neurodegeneration syndromes**

Speaker

Dr Nicolas Foray

16:00–16:20 **ATM-ApoE crown formation in Alzheimer's disease**

Speaker

Felipe Olivares

16:20

17:00

### Modeling of protein dynamics with applications to Neurodegenerative Diseases

Session | Location: University of Graz, 15.12 - HS

17:00–17:20

**Modeling the Prion Aggregation Process During Polymerization Experiments Using Delay Differential Equations**

Speaker

Mr Theo Loureaux

17:20–17:40 **An optimal control problem for anti-inflammatory treatments of Alzheimer's disease**

Speaker

Dr Nicolás Torres Escorza

17:40–18:00

**Fragmentation vs. Trimming: A Mathematical Framework for Resolving the Mechanism of Hsp104 Action on [PSI<sup>+</sup>] Aggregates**

Speaker

Dr Suzanne Sindi

18:00–18:20 **Study of a bi-monomeric Becker-Döring-type model**

Speaker

Dr Mathieu Mezache

18:20