



Seminars in Neuroscience

Dr. Thomas Riemensperger

Universität zu Köln,

Institut für Zoologie

Role of dopaminergic circuits in behavior modulation

April 7, 2025 at 16:00

Biocenter, Zülpicher Str. 47b,

Lecture hall, Ground floor

Animals modulate their behavior depending on their internal states. Dopaminergic neurons are one of the most important components for this system throughout animal taxa. Using fruit fly as a model, we analyzed the role of dopaminergic neurons in the control of intrinsic behavior such as feeding, sleep and locomotion, experience-dependent behavior such as learning, disease models such as Parkinson's and bacterial infection, as well as the developmental time course of dopaminergic network formation. We put the dopaminergic system in the comprehensive framework of neuromodulation by mapping essentially all the monoaminergic neurons in the electron microscopy connectome data to find their organization principles.

Host: Prof. Dr. Kei Ito k.ito@uni-koeln.de