

***Talk on Tuesday, 21. March 2023***

***in HS 402***

***Start: 15:00 s.t. (till 16.15)***

***The talk will be presented in English***

# Using Skinnerian and Pavlovian genes to improve motor learning in *Drosophila*

**Prof. Dr. Björn Brembs**  
**Universität Regensburg**



Seventy years before Kandel's Nobel for "the cellular and molecular mechanisms which make us remember", Skinner and Konorski publicly discussed similarities and differences between two types of learning, later called operant and classical conditioning, respectively. We now know that Kandel's discoveries mainly concern classical learning, while most operant forms of learning engage multiple types of learning. We have discovered a motor learning component with cellular and molecular mechanisms separate from other forms of learning. This type of motor learning is

involved processes as disparate as language acquisition in humans and motor adaptation in fruit flies. Interactions with other forms of learning can increase and decrease the learning rate of this form of motor learning, opening up a variety of avenues for improving motor learning.