



**University of  
Zurich** <sup>UZH</sup>

## Department of Economics – Neuroeconomics Seminar

**November 15, 2018 - 17:00 - 18:00**

Marc Guitart-Masip  
*Karolinska Institutet*

### **Dopaminergic Modulation of Learning and Decision Making**

Dopamine has an important role in modulating learning and decision-making and its decline is thought to contribute to impaired decision-making abilities in older adults. In order to better understand the role of dopamine in learning and decision-making, I combine behavioral experiments in younger and older adults along with fMRI measures of regional neuronal activity and PET measures of endogenous dopamine function. I will present data showing the importance of dopaminergic modulation for the emergence of anticipatory value signals using a standard two-armed bandit task tackling probabilistic learning. I will also present data showing that dopaminergic modulation in the dorsal striatum is related to the emergence of a behavioral bias during instrumental learning.