University of Zurich[UZH]

## Department of Economics – Neuroeconomics Seminar

**December 4, 2025 - 15:45 - 16:45**

Silvia Lopez-Guzman
National Institute of Mental Health

### (Im)precision in decision-making and metacognition as both traits and states

Decisions are broadly acknowledged to result from noisy processing of information. While the possible sources of noise in the decision-making process are an active area of research, the implementation of computational models of decision-making has become pervasive in psychology and neuroscience studies, and specifications of noise terms (either consciously or unconsciously) are thus widely adopted. In this talk, I explore how these specifications differ and how their widespread use have made it possible to ask whether stochasticity in decision-making is a stable individual characteristic that may be relatable to factors such as development and psychopathology. In the second half of the talk, I introduce a similar argument about noisy information processing at a meta-cognitive level and discuss how emerging computational models of introspection and confidence suggest similar trait-like properties. I end the talk with empirical evidence that while individual differences in stochasticity at the decision and meta-decision level exist, these computations are also state-dependent and may be modified by internal states like stress or negative emotion.