



**University of
Zurich** ^{UZH}

Department of Economics – Neuroeconomics Seminar

September 28, 2023 - 17:15 - 18:00

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A view-based mechanism for economic choice in primate amygdala neurons

Primates, including humans, make decisions visually by shifting their view from one object to the next, comparing economic values between objects, and choosing the best option, even before acting. I will present new data to show that when monkeys make economic choices, amygdala neurons encode their decisions in an abstract, purely internal representation defined by the monkey's current view but not by specific object or reward properties. Across amygdala subdivisions, recorded activity patterns evolved gradually from an object-specific value code to a transient, object-independent code in which currently viewed and last-viewed objects competed to form a view-based choice. Using neural-network modelling, we identify a sequence of computations by which amygdala neurons implement view-based decision-making and eventually recover the chosen object's identity when the monkeys act on their choice. These findings reveal a neural mechanism in the amygdala that derives economic choices from abstract, view-based computations, suggesting an efficient solution for decision problems with many objects."

Zoom Link:

<https://uzh.zoom.us/j/66083933314?pwd=SnpXTCswQ05DSGtCTTc3OTRTMVBRdz09>
Meeting ID: 660 8393 3314