

Department of Economics – Neuroeconomics Seminar

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Yael Niv Princeton University

Latent causes, prediction errors, and the organization of memory

In recent years, my lab has suggested that incoming information is parsed into separate clusters ("states" in reinforcement learning parlance) -- all events that are assigned to one cluster are learned about together, whereas events in different clusters do not interfere with each other in learning. Moreover, we have suggested that prediction errors are key to this separation into clusters. In this talk, I will revisit these ideas building not only on behavioral experiments showing evidence for clustering, but also experiments that show the effects of prediction errors on episodic memory. I will attempt to tie the different findings together into a hypothesis about how prediction errors affect not only learning, but also the organization of memory.