



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

## Department of Economics – Neuroeconomics Seminar

**February 26, 2026 - 17:00 - 18:00**

Tyler Brooke-Wilson  
Yale University

### **Model Synthesis Architectures for Reasoning and Planning**

How does the mind effectively model the world for reasoning and planning? Answering this requires specifying a cognitive architecture – a basic set of representations and operations over them that is stable across diverse bouts of cognition. Advances in AI have made building out and testing partial theories of cognitive architecture increasingly attainable, allowing these classic questions of the structure of the mind to be approached head on. In this talk, I'll discuss the chief desiderata for a human-like cognitive architecture, outline a theoretical argument for a particular class of cognitive architectures, and share preliminary empirical results comparing a basic implementation to natural alternatives. I end with some lessons for human rationality – that is, how we ought to use our minds in light of what they can and cannot do.