



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

## Department of Economics – Neuroeconomics Seminar

**March 5, 2026 - 17:00 - 18:00**

Tobias Kalenscher  
University of Düsseldorf

### **How stress affects social preferences**

How does stress shape our social behavior? Does it make us more generous or more aggressive? In a series of pharmacological and behavioral studies, we explored how acute stress or stress neuromodulators influence prosocial decision-making, with a focus on social discounting, the tendency to value close others more than distant ones. In our first study, we found that acute psychosocial stress increased generosity, but selectively toward socially close individuals—a pattern aligning with the "tend-and-befriend" hypothesis. To probe the underlying mechanisms, we next manipulated the two main neuromodulators of stress, cortisol and noradrenaline, in a psychopharmacological experiment. We found that elevated cortisol alone promoted prosociality toward close others, whereas noradrenaline had no effect in isolation but nullified cortisol's prosocial influence when co-administered. In a final study using an intergroup conflict paradigm, we extended these findings to show that cortisol enhanced cooperative in-group support, while noradrenaline fueled parochial competition; that is, noradrenaline action fostered support for one's own group coupled with hostility toward outsiders. Together, these results reveal that stress does not universally enhance or impair prosociality and/or aggression. Instead, it flexibly modulates behavior depending on neuroendocrine balance and social context. This work challenges the simplistic dichotomy of fight-or-flight versus tend-and-befriend, and instead suggests that both may be co-activated, with downstream consequences for cooperation, competition, and perhaps the escalation of real-world intergroup conflict.