

# Colloquium

## Prof. Tobias Kalenscher

(Experimental Psychology, Heinrich Heine University Düsseldorf)

**Tuesday, 20. May 2014, 18:00 hours, GA 04/187**

Host: Prof. Oliver T. Wolf  
Department of Cognitive Psychology

All interested students, scientists, and scholars are cordially invited to this talk of the IKN colloquium.

### **The decline of generosity – Social discounting involves modulation of neural value signals by temporal-parietal junction**

People are generous, but not towards everyone alike: generosity usually declines with social distance between individuals, a process called social discounting. We used fMRI to study the neural basis of social discounting. Participants chose between selfish and generous alternatives, yielding either a large reward for the participant alone, or smaller rewards for the participant and another individual at a particular social distance. We found that neural activation in ventromedial prefrontal cortex and ventral striatum reflected own-reward value, but also the extra value of a generous choice. Generous choices additionally engaged temporal-parietal junction (TPJ). TPJ activity was scaled to the social-distance-dependent conflict between selfish and generous motives during pro-social choice, consistent with ideas that TPJ promotes generosity by facilitating overcoming egoism bias. We propose and provide evidence for a neural model according to which TPJ supports social discounting by modulating basic neural value signals to incorporate social-distance-dependent other-regarding preferences into an otherwise exclusive own-reward value representation.

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