Module Socio-Cognitive Neuroscience (M.Psy.1006), SoSe 2024

Socio-cognitive neuroscience aims to understand phenomena in terms of the interactions between three levels of analysis: 1) the social level, which examines the influence of socio-motivational and emotional factors on experience and behavior, 2) the cognitive level, which deals with the information-processing mechanisms that lead to phenomena on the social level, and 3) the neural level, which deals with the neural mechanisms underlying social cognition.
Students acquire in-depth knowledge of theories and current findings in socio-cognitive neuroscience. They learn the basics of imaging, electrophysiological and peripheral physiological methods and their application in this field of research.

Structure: Each topic is covered in an introductory lecture by the lecturers and a joint discussion of a paper in the group.

Study performance: Regular study of literature, preparation and presentation of short papers as well as regular active participation in the discussions in the two seminars.

Schedule and Topics:

- Introduction to Socio-cognitive Neuroscience & discussion of organizational issues (April 9th)
- Topic 1: How language shapes perception of emotions (introduction: April 16th, reading group: April 23rd)
- Topic 2: Social learning (introduction: April 23rd, reading group: April 30th)
- Topic 3: Social decision making (introduction: April 30th, reading group: May 7th)
- Topic 4: Anti-social behavior (introduction: May 7th, reading group: May 14th)
- Topic 5: Music and social interactions (introduction: May 14th, reading group: May 28th)
- Topic 6: Human-machine interaction (introduction: May 28th, reading group: June 4th)
- Topic 7: Conformity (introduction: June 4th, reading group: June 11th)
- Topic 8: Emotion Regulation (introduction: June 11th, reading group: June 18th)
- Topic 9: How language shapes perception of the world (introduction: June 18th, reading group: July 2nd)
- Integrative discussion and Q&A session (July 9th)

Literature:

T1: Gendron, M., Lindquist, K. A., Barsalou, L. & Barrett, L. F. (2012). Emotion words shape emotion percepts. *Emotion, 12*, 314-325

T2: Heyes, C. (2016). Who knows? Metacognitive social learning strategies. *Trends in cognitive sciences, 20(3)*, 204-213.

T3: Izuma, K., & Adolphs, R. (2013). Social Manipulation of Preference in the Human Brain. *Neuron, 78(3)*, 563-573.

T4: Kawamoto, T., Nittono, H., & Ura, M. (2013). Cognitive, Affective, and Motivational Changes during Ostracism: An ERP, EMG, and EEG Study Using a Computerized Cyberball Task. *Neuroscience Journal, 2013*, 1–11. https://doi.org/10.1155/2013/304674

T5: Gugnowska, K., Novembre, G., Kohler, N., Villringer, A., Keller, P. E., & Sammler, D. (2022). Endogenous sources of interbrain synchrony in duetting pianists*. Cerebral Cortex, 32(18*), 4110-4127

T6: tba

T7: Wittmann, M., Kolling, N., Faber, Nadira S., Scholl, J., Nelissen, N., & Rushworth, Matthew F. S. (2016). Self-Other Mergence in the Frontal Cortex during Cooperation and Competition. *Neuron, 91(2)*, 482-493.

T8: Burr, D. A., et al. (2020). Emotion Dynamics Across Adulthood in Everyday Life: Older Adults Are More Emotionally Stable and Better at Regulating Desires. *Emotion, 21(3*), 453-464.

T9: Boutonnet, B. et al. (2013) Seeing objects through the language glass. *J. Cogn. Neurosci. 25*, 1702–1710