universität innsbruck
Digital Science Center (DiSC)

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Department of Psychology

DiSCourse Seminar

The Department of Psychology and the Digital Science Center would like to invite you to the following presentation:

Mag. Dr. Matthias Schurz

"Separating the Neural Building Blocks of Social Cognition"

This talk presents meta-analytic and empirical evidence from functional brain imaging on the separation of functional processes for understanding others (theory of mind), with a focus on the lateral posterior parietal cortex. We carried out quantitative neuroimaging meta-analyses (Schurz et al., 2014; 2020) and a probabilistic labeling review (Schurz et al., 2017) of reported brain activation around the temporo-parietal cortex for theory of mind tasks. These works suggest that, in this region, brain activation for theory of mind and affect sharing is shaped by underlying structural brain connectivity networks, which converge around parietal association cortex. To follow up our hypothesis, we carried out a new fMRI study, scanning BOLD activity for a number of theory of mind tasks, as well as brain connectivity from resting-state fMRI. The temporo-parietal area was parcellated according to whole-brain connectivity fingerprints, and relationships to functional brain activity were analyzed. Findings are relevant for understanding to what extent activations for different theory of mind tasks in the temporo-parietal cortex reflect operations of a single, common brain network (i.e. fall within one parcellated area), and if they are rather shaped by conjoint operation of multiple networks (i.e. fall within multiple parcellation areas / a border area between parcellations). This, in turn, is helpful for understanding what the possible common process is that's engaged by different theory of mind tasks, i.e. the process underlying activation in a so-called theory of mind "core-area" (Schurz et al., 2014).

Date and Time: Friday, 26 February 2021, 12:00 CET (noon)

Please note: This presentation will be given **online** in Big Blue Button. Participants do not need to register.

Guests are welcome!

Universität Innsbruck – Digital Science Center
Phone: +43 512 507 39750
E-mail: disc@uibk.ac.at