Title: What does the mean mean? Qualitative vs. quantitative individual differences

Instructor: Martin Schnuerch

<u>Abstract:</u>

Psychological phenomena are typically understood in reference to the mean: We compare means across conditions and report effect sizes in terms of standardized mean differences. What does the mean actually mean, however, in the face of individual differences? The answer to this question hinges critically on whether individuals differ quantitatively (in the *size* of individual effects) or qualitatively (in the *direction* of individual effects).

In this workshop, we will discuss the difference between quantitative and qualitative differences and how this distinction may be of relevance to all subfields of psychology. In the first part, we will discover statistical modeling techniques to account for and test the specific structure of individual differences (namely, Bayesian hierarchical models and Bayes factor model comparisons) with concrete applications in R. In the second part, we will apply these techniques in the context of real-data examples from social and cognitive psychological research.

Assignment: Active participation

Credits: 2 workshop days