

Neural Decoding of Emotional Experiences in Humans

Abstract:

Understanding the precise brain basis of emotional experiences represents a prerequisite for defining how these processes become dysregulated in mental disorders and how these processes can be therapeutically targeted. Recent advances in the combination of human brain imaging with machine learning based neural decoding have allowed to develop comprehensive and precise models on how the brain constructs specific emotional experiences and how different levels of the subjective experience can be distinguished. However, it remains unclear whether these models that have been developed in the laboratory setting can contribute to the evaluation of novel interventions for mental disorders and whether these models can capture dynamic emotional experiences under naturalistic contexts.

The talk will present recent advances in neural decoding of subjective emotional experiences in humans and how this can translate into therapeutic profiling of novel interventions and into ecologically valid brain models for dynamic emotional experiences.