

Psychology in the 'Digital Age'

On behalf of the Department of Psychology we are very happy to invite you to the following guest lecture:

"Towards a mechanistic understanding of the human subcortex "

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LEOPOLDSTR. 13, ROOM 1310

Today only seven percent of the subcortical structures listed by the Federative Community on Anatomical Terminology (FCAT, 1998) are depicted in available standard MRI-atlases (Alkemade, Keuken, & Forstmann, 2013). As a consequence, the remaining 423 subcortical structures cannot be studied using automated analysis protocols available for MRI and therefore require trained anatomists for the study of subcortical brain areas: The human subcortex is notoriously difficult to visualize and analyze with functional magnetic resonance imaging.

In this talk, exciting technical advances are presented that allow charting terra incognita; the human subcortex. Closing the knowledge-gap of the human subcortex has already resulted in the re-evaluation of prominent models in the cognitive neurosciences such as the functional role of cortico-basal ganglia loops in decision-making. I will discuss the emerging possibilities of novel human neuroanatomical approaches and directions for the incorporation of these data within the field of model-based cognitive neuroscience.