Max Planck School of Cognition Colloquia

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Cortical gradients of functional integration

Understanding how the cerebral cortex transforms distinct sources of information into cohesive experiences requires knowledge of how functional integration emerges from cortical structure. Insights into functional processing streams indicate that cortical areas are arranged stepwise, representing functional gradients along the cortical surface. Having been largely restricted to describing processing within specific sensory modalities, how do these principles generalize and extend to the surrounding association cortex? Building on recent work characterizing a principal axis of cortical organization, I will present a line of research that investigates the role of cortical geometry in enabling convergence across distinct modalities. By describing how the spatial layout of the cerebral cortex shapes its function, this line of research proposes a framework for understanding structural constraints that contribute to the integrated nature of cognition.

Join online:
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Meeting ID: 935 2603 0034
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