Forschungskolloquium Experimentelle Psychologie

Einladung
zum Forschungskolloquium Experimentelle Psychologie
am Mittwoch den 29.05.2024
um 14:15 Uhr, Waldweg-Altbau, Raum 0.705

Prof. Dr. Alexander C. Schütz, Marburg University

Interactions between peripheral and foveal vision

Visual processing is not homogeneous across the visual field: acuity and contrast sensitivity peak at the center of the visual field, the fovea, which is used for reading or fine object manipulation. The peripheral visual field allows for a large field of view at lower resolution and is used for navigation and locomotion. However, humans usually do not notice the large changes in visual information that result from bringing an object from the periphery to the fovea with a gaze shift. Here, I will present evidence that there are close links between peripheral and foveal vision that help to alleviate the differences between peripheral and foveal vision and to optimize perception. Processing of peripheral information in foveal retinotopic cortex facilitates the recognition of unfamiliar and familiar objects in the periphery and the integration of peripheral and foveal signals across saccadic eye movements optimizes information gain and conceals differences between peripheral and foveal information. This suggests that peripheral and foveal vision is interrelated despite the differences in processing.

Prof. Dr. Uwe Mattler