

THE LANGUAGE CIRCLE

MPI FOR HUMAN COGNITIVE AND BRAIN SCIENCES, STEPHANSTRASSE 1A, LEIPZIG

13.03.2024, 13:00 CET

Wilhelm Wundt Room and on Zoom

Tineke Snijders
Tilburg University, NL

Relating infants' neural tracking of (multimodal) speech to language development

Infants use rhythmic information as an important cue for word segmentation. One possible mechanism for this might be neural tracking of speech: the synchronization of neural responses to rhythms in speech. In this talk, I will discuss two longitudinal studies relating infants' neural speech tracking to word segmentation performance, as well as to their later vocabulary development. Furthermore, I will discuss two experiments investigating how infant neural tracking of speech is modulated by visual information such as eye gaze and mouth movements. Together, the experiments inform about the functional relevance of neural tracking of speech for early language development. I will argue that rhythmic neural speech tracking reflects infants' attention to specific parts of the speech signal (e.g. stressed syllables), and will speculate on how possibilities for temporal attention to (multimodal) speech might be influenced by both environmental setting and neural maturation state.



MAX PLANCK INSTITUTE
FOR HUMAN COGNITIVE AND BRAIN SCIENCES