Studying language in and by the brain: Configuration and formation of word representations assessed neurophysiologically

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Can neurophysiology address questions debated in (psyho)linguistics such as the nature of word representations, how they are formed in learning, what configuration they take and how they interact? In this talk, we will explore the neural reflections of linguistic processing that can be registered using time-resolved neurophysiological recordings available in magneto- and electro-encephalography (MEG, EEG). I will try to convince you of the ultra-rapid speed and automaticity of lexical activations in the brain and the distributed character of word representations dependent on their semantic features. We will see how MEG/EEG can be used to resolve morphosyntactic questions and track the neural correlates of rapid word learning with simple yet precise methodologies that can potentially be used also in clinical assessment of disturbances in linguistic processes.