



RESEARCH GROUP NEURAL CIRCUITS,
CONSCIOUSNESS, AND COGNITION

You are invited!

NCCLab Talks 2024, Lecture series

Florian Mormann

Dept of Epileptology, University of
Bonn, Germany



Concept neurons in the human medial temporal lobe as semantic building blocks for episodic memory

Abstract: The human medial temporal lobe contains neurons that respond selectively to the semantic contents of a presented stimulus. These "concept cells" may respond to very different pictures of a given person and even to their written and spoken name. Their response latency is far longer than necessary for object recognition, they follow subjective, conscious perception, and they are found in brain regions that are crucial for declarative memory formation. It has thus been hypothesized that they may represent the semantic "building blocks" of episodic memories.

In this talk I will present data from single unit recordings in the hippocampus, entorhinal cortex, parahippocampal cortex, and amygdala during paradigms involving object recognition and perception as well as encoding and consolidation of episodic memories in order to characterize the role of concept cells in these cognitive functions.



**12 August 2024
11:00 (CEST)**



MPI for Empirical Aesthetics,
room 416-419,
Grüneburgweg 14, 60322
Frankfurt am Main, Germany

Zoom link: <https://tinyurl.com/NCCLAB-FLORIAN-MORMANN>

Organized by Yuranny Cabral Calderin

for more info visit <https://ncclabmpi.github.io/NCCLab-Talks/>
or contact: [yuranny.cabral-calderin\(at\)ae.mpg.de](mailto:yuranny.cabral-calderin(at)ae.mpg.de)