

SFB 1315 Mechanisms and Disturbances in Memory Consolidation: From synapses to systems Wednesday

#### DEC 9, 2020 6:00 pm CET

ZOOM ID: 7754910236 Contact: SFB1315.ifb@hu-berlin.de

#### SFB 1315 LECTURE SERIES 2019-2021

# ZIPPING AND UNZIPPING THE HIPPOCAMPAL 'INDEX' CODE

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Deutsche Forschungsgemeinschaft German Research Foundation



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## ZIPPING AND UNDZIPPING THE HIPPOCAMPAL INDEX CODE

A modern variant of Teyler and Discenna's "Hippocampal Index Code" theory predicts that the index code should be observable in superficial neocortex.

It appears that the index code is first 'zipped' in CA1 and Subiculum before exporting to neocortex, where it is indeed unzipped and encoded in sparse/orthogonal, spatial position correlated, sequences in superficial neocortex. A focal point for the transmission from hippocampus to neocortex appears to be the retrosplenial cortex; however, it appears that the index code characteristics spread polysynaptically throughout the superficial neocortex.

Damaging the hippocampus seriously disrupts the superficial cortical spatial sequence representations.



Funded by



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