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

Tuesday

MAR 16, 2021
4:00 pm CET

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

SFB 1315 LECTURE SERIES 2019-2022

WAYS TO THINK ABOUT THE BRAIN

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NeuroCure Cluster of Excellence
EINSTEIN CENTER Neurosciences

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György Buzsáki, New York University, School of Medicine

Current neuroscience is largely fueled by an empiricist philosophy that assumes the brain's goal is to perceive, represent the world, and learn the truth. An inevitable consequence of this framework is the assumption of a decision-making homunculus wedged between our perception and actions. In contrast, I advocate that the brain's fundamental function is to induce actions and predict the consequences of those actions to support the survival and prosperity of the brain's host.

Only actions can provide a second opinion about the relevance of the sensory inputs and provide meaning for and interpretation of those inputs. In this "inside-out" framework, the brain comes with a preconfigured and self-organized dynamic that constrains how it acts and views the world.

In the brain's nonegalitarian organization, preexisting nonsense brain patterns become meaningful through action-based experience. I will show recent experiments that support this framework.

Further reading:
Buzsaki, G. Rhythms of the Brain (Oxford University Press 2006)

Buzsaki G. The Brain from Inside Out (Oxford University Press 2019)

Dr. Buzsaki's lecture is part of Brain Awareness Week in cooperation with BCCN Berlin, the Einstein Center for Neurosciences Berlin, and the NeuroCure Cluster of Excellence
www.brainawareness.org

SFB1315 Deputy Speaker Richard Kempter will introduce the talk, and Speaker Matthew Larkum will moderate Q&A.

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