



Dr David Dupret

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CONFERENCE au CRNL LE VENDREDI 11 OCTOBRE à 10h
(Amphithéâtre du Neurocampus, Centre Hospitalier Le Vinatier, bâtiment 462)

Circuit dynamics of a memory representation within the hippocampus, and beyond

Hippocampal neuronal activity, described in terms of spatio-temporally organised spike discharge and rhythmic fluctuations of the local field potentials, supports information processing with relevance to memory. In this talk, I will discuss recent findings supporting the idea that spectral components nested in individual cycles of the theta-band (4–12Hz) oscillations report transient hippocampal operating modes with complementary mnemonic roles. I will then present novel work that uncover a circuit motif embedded in the nucleus accumbens that enables the behavioural readout of a hippocampal memory representation. I will conclude by sharing ongoing investigations describing cross-structural organisation of spike discharge related to brain-wide assemblies for effective appetitive behaviour. Altogether, these data further highlight how fine-grained neural dynamics in the hippocampus and connected circuits promote memory-guided behaviour.