European Neuroscience Institute Göttingen

Dr. Martin Vinck

Ernst Struengmann Institute for Neuroscience
in Cooperation with Max Planck Society, Frankfurt

Spatial predictions enhance gamma waves in awake monkey visual cortex

During active wakefulness, cortical activity organizes itself into highly coherent patterns of gamma waves (30-80Hz). These waves are believed to be essential for cortical communication and synaptic plasticity. Their impairment is a hallmark of neurological and psychiatric disorders. Yet, it remains heavily debated what gamma waves encode, and what their precise role in information transmission is. The standard view in predictive coding theories is that gamma waves carry prediction errors. However, we have recently hypothesized the opposite, namely that gamma waves signal a match between sensory predictions and sensory inputs. I will show experimental data from awake macaque monkeys in support of this hypothesis

Wednesday, November 14th 2018, at 12:00
ENI, seminar room 2nd floor
Contact: c.schwiedrzik@eni-g.de