BCL5

5th Workshop on Brain, Computation, and Learning

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Using Gamma Oscillations to understand decoding and encoding in the brain

Abstract: Gamma oscillations are high-frequency (30-80 Hz) oscillations in brain signals which are modulated by high-level cognition such as attention and meditation but can also be strongly induced in the visual cortex by viewing certain visual stimuli such as gratings or reddish hues. I will first discuss decoding of visual stimuli and attentional states by different types of brain signals. Then, I will discuss how studying and modelling the temporal dynamics of gamma rhythms provide important clues about the underlying neural circuitry.