

## Distinct roles of theta and gamma rhythms in inter-areal interaction in human visual cortex revealed by cortico-cortical evoked potentials

Primate visual cortex is hierarchically organized with dense inter-areal projections [1]. Primary visual cortex (V1), as the first stage of visual cortical processing, communicates with lower visual cortex (LVC, i.e., V2 and V3) and higher visual cortex (HVC, visual areas higher than V3) through both feedforward and feedback interactions [2,3]

an enhanced gamma-band power, while that from HVC to V1 was characterized by an enhanced theta band power. However, we only observed suppressed effects or no effect in the feedforward connectivity. Considering that we used transient and weak electrical pulses in the CCEP experiment, which did not induce any subjective visual experience for the patients, the suppression may reflect subthreshold

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