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The pre-stimulus oscillatory alpha phase affects neural correlates of early visual perception

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Highlights

- The pre-stimulus alpha affects neurophysiological correlates of visual perception in the primary visual cortex.
- The pre-stimulus alpha phase modulates the latency of the N75 and P100 components of the visual evoked potential (VEP).
- Phase dependence was observed for the individual alpha peak frequency (iAPF) but not the frequency of maximal phase locking (PLF_{fmax}).
- The results suggest an alpha phase-dependence of neurophysiological processes and support current models suggesting visual perception is affected by cyclic modulations in the neuron's state of excitability.

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