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Directional hippocampal-prefrontal interactions during working memory

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Highlights

- Synchronous recording from rat vHPC and mPFC during a working memory task.
- Estimation of lags between vHPC and mPFC using amplitude cross-correlation.
- A strong lead from vHPC to mPFC preceded an animal's correct choice during working memory.
- The vHPC lead contributes to the successful execution of working memory.

Abstract

Working memory refers to a system that is essential for performing complex cognitive tasks such as reasoning, comprehension and learning. Evidence shows that

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