

Accepted Manuscript

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PII: S0304-3940(18)30603-7
DOI: <https://doi.org/10.1016/j.neulet.2018.09.004>
Reference: NSL 33792

To appear in: *Neuroscience Letters*

Received date: 25-6-2018
Revised date: 20-8-2018
Accepted date: 4-9-2018

Please cite this article as: Pluta A, Williams CC, Binsted G, Hecker KG, Krigolson OE, Chasing the zone: Reduced beta power predicts baseball batting performance, *Neuroscience Letters* (2018), <https://doi.org/10.1016/j.neulet.2018.09.004>

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Chasing the zone: Reduced beta power predicts baseball batting performance

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Highlights

- Beta band EEG power predicts baseball batting performance
- Demonstrates use of mobile EEG
- Provides insight in performance prediction
- Beta power reflective of the “sports zone”

Abstract

Mental state prior to sports skill execution is related to subsequent performance. For example, relationships between pre-performance electroencephalogram (EEG) power and subsequent movement outcomes in golf putting, pistol shooting, and basketball free throw shooting have been previously reported. With that said, the existing body of research examining the pre-performance EEG – performance relationship has been focused on the execution of internally as opposed to externally-paced motor skills. Given that the execution of internally and externally-paced movements are dependent on different neural pathways, in the present study we

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