

# A STATISTICAL FRAMEWORK TO ASSESS CROSS-FREQUENCY COUPLING WHILE ACCOUNTING FOR CONFOUNDING ANALYSIS EFFECTS

- Cross frequency coupling (CFC) is a fundamental feature of brain activity.
- We developed a new statistical modeling framework to detect CFC between low and high frequency rhythms.
- The new method outperforms an existing method in biologically-motivated examples.
- For details see Nadalin et. al., *eLife*: e44287 (2019)  
<https://doi.org/10.7554/eLife.44287>

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**Download the method.** <https://github.com/Eden-Kramer-Lab/GLM-CFC>

**Apply it.**  $V_{lo}$ : the low frequency signal  
 $V_{hi}$ : the high frequency signal

Add 'empirical', 0.05  
to compute p-values.

```
>> [gCFC, pvals] = glmfun(Vlo, Vhi);  
>> surf(gCFC.ampAXIS, gCFC.phi0, gCFC.CFC)
```