SIGNAL PROCESSING IN MNE: DAY 3

3 – SPECTRAL CONNECTIVITY
MULTIVARIATE CONNECTIVITY IN MNE

09.02.2024

Thomas S. Binns thomas-samuel.binns@charite.de

EINSTEIN CENTER Neurosciences

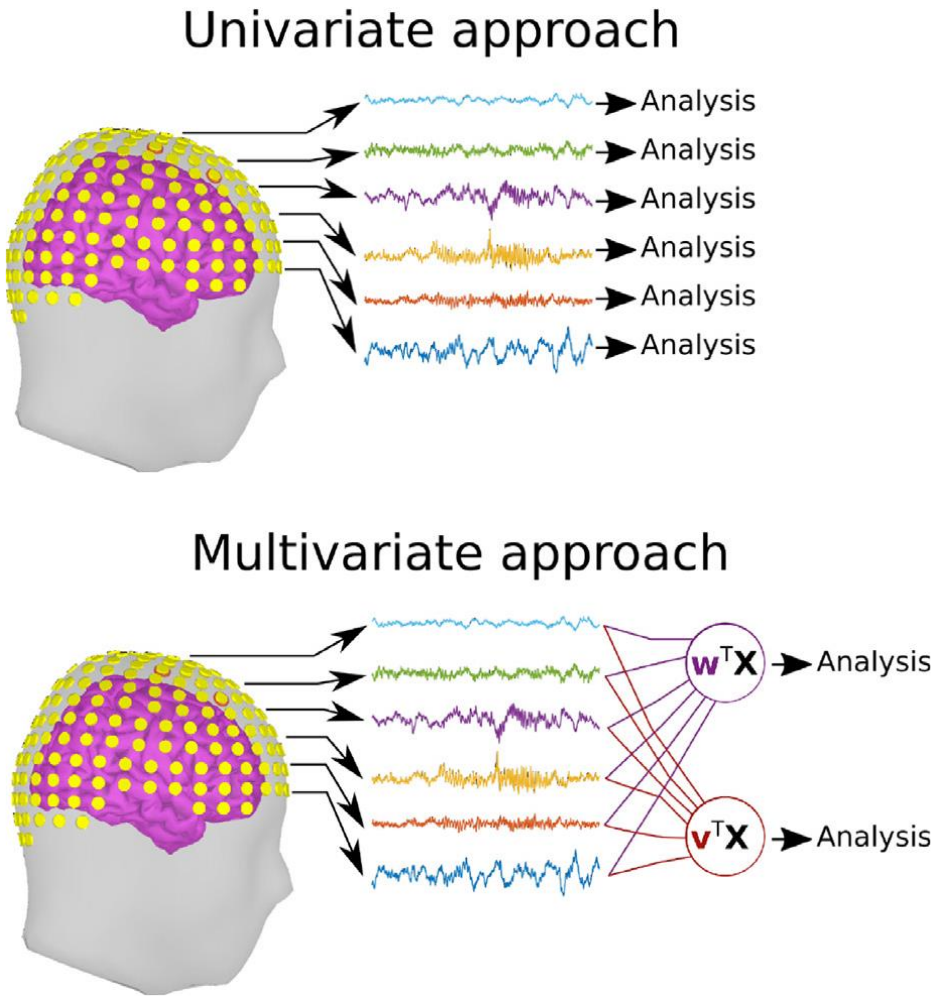
ICN Interventional & Cognitive Neuromodulation

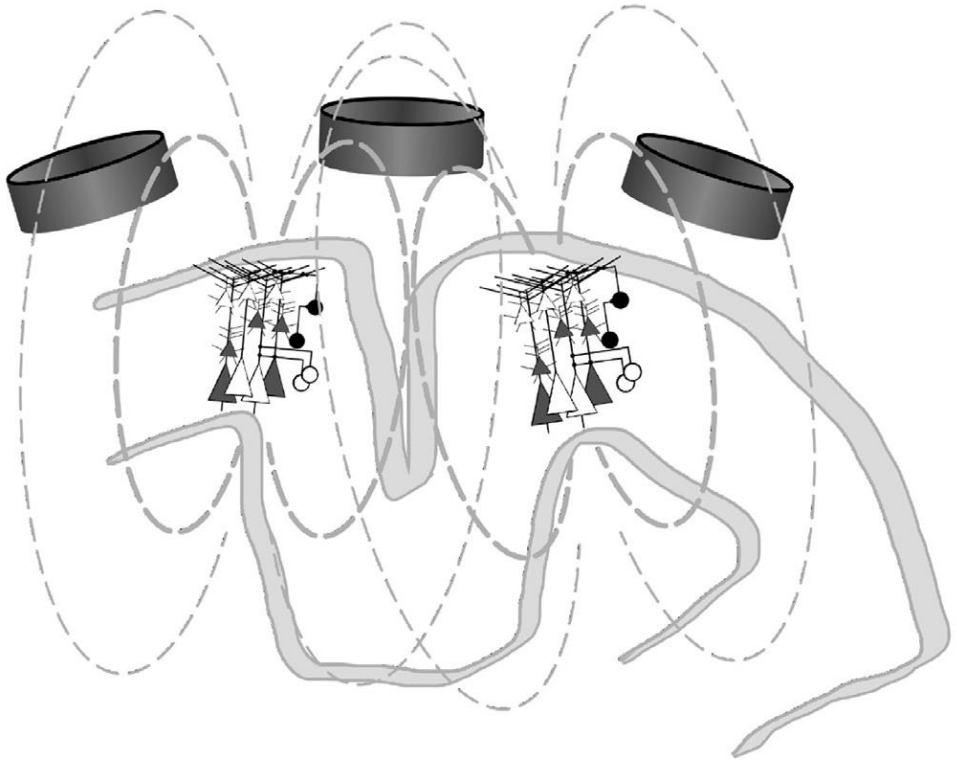
Brain and Data Science QAI LABS

bccn berlin

CHARITÉ

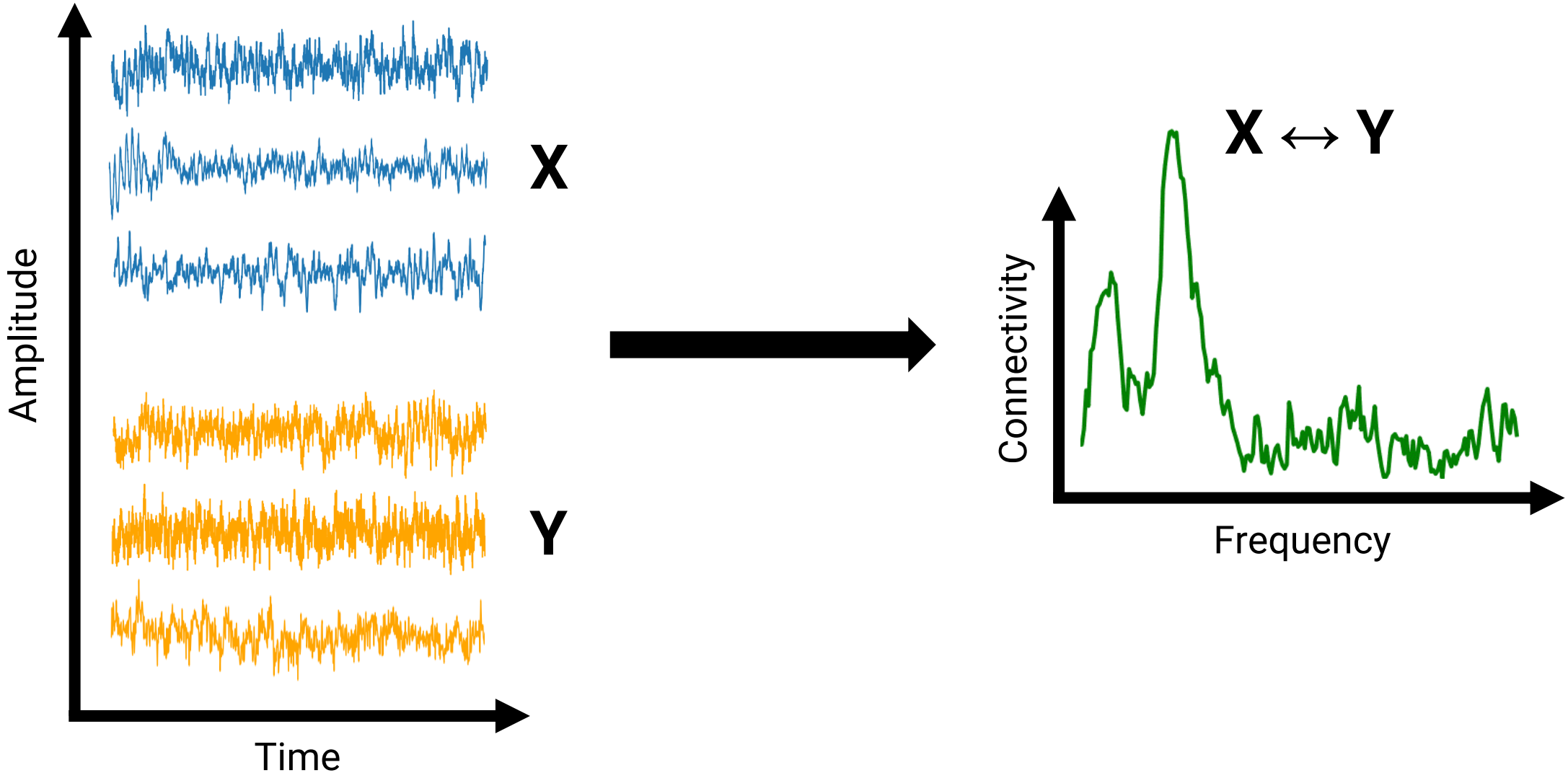
Uni/bi- vs. multi-variate analyses



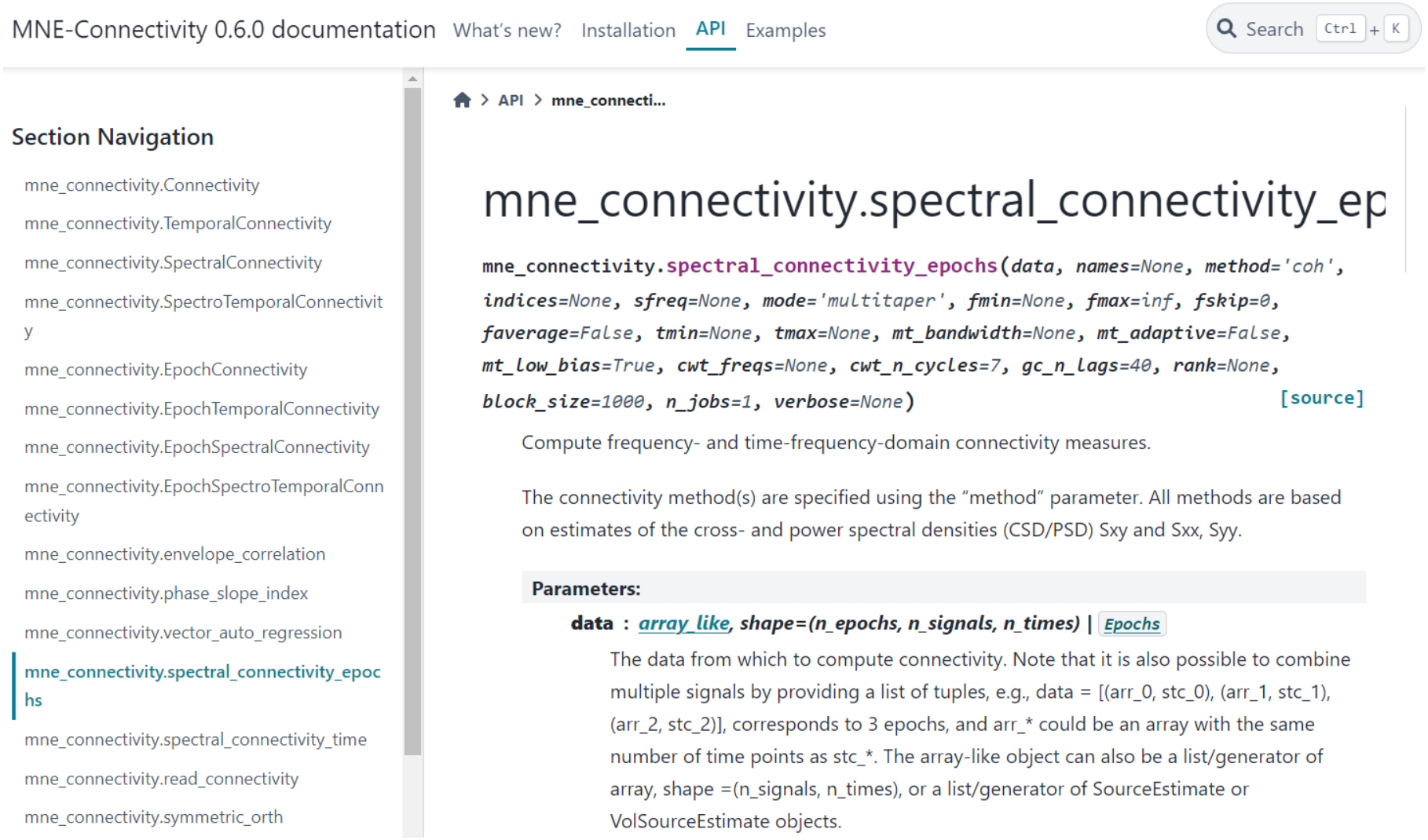


Cohen (2022). *NeuroImage*.
DOI: 10.1016/j.neuroimage.2021.118809

Multivariate spectral connectivity



Multivariate spectral connectivity



Onto the notebook…

Conclusion

- Tools for computing multivariate spectral connectivity in the `mne-connectivity` package
  - `spectral_connectivity_epochs()`
  - `spectral_connectivity_time()`
- Directed and undirect connectivity methods supported
- Can be computed from `Epochs/EpochsArray` objects and data arrays