

HBN Warmup project (SAB2)

Week 7 (20 May - 26 May)

Workload:

- ① Finalizing source reconstruction on more epochs (increased to 205)
- ② Computing PSD at source on occipital areas
- ③ understanding bit more about the whole source reconstruction stack

if computationally intensive:

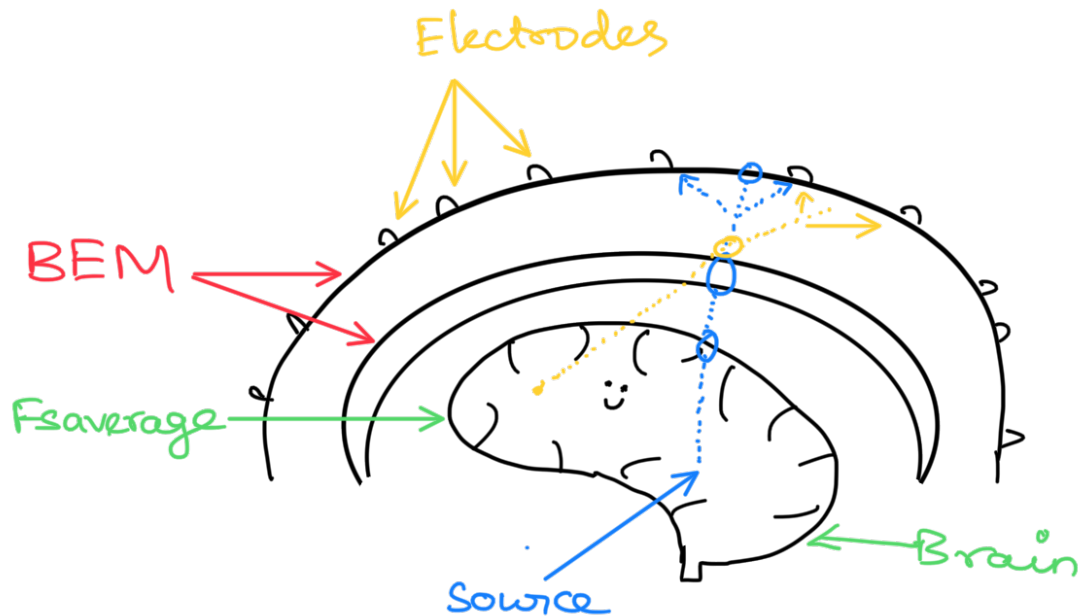
- ① Downsampling to 250 Hz
- ② After this, average them using Atlas

Optionally:

- ① "what neuroimaging can and cannot reveal....."
By Russel A. Poldrack (2 chaps ✓/9) (~50 pages)

Next week:

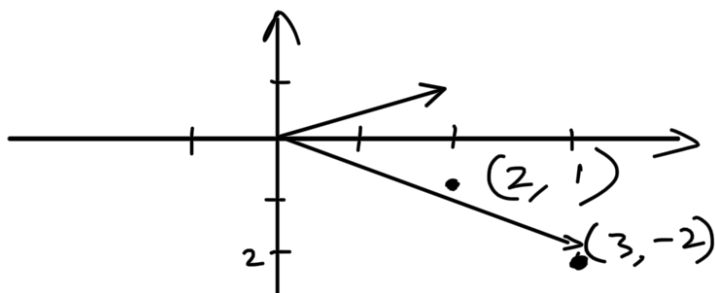
- ① solve the "②" above
- ② Inter-subject study (No surprise)



Post synaptic source (Potential) \rightarrow Brain outer shell \rightarrow Skull \rightarrow Scalp \rightarrow Electrode

"More distant the signal has to travel, more uncertainties get introduced"

MNE - Minimum Norm estimate



with "a priori", we get $(3, -2)$

Measured = $(2, 1)$

How do I transform $(2, 1)$ so that we land at $(3, -2)$, = Magical Matrix and "minimise" the "landing" error

eLORETA = low resolution electromagnetic
↓
exact "Tomography"

Nutshell: Find the strength of the activity at
vertices in terms of electrical & magnetic field