

Introduction to Computational Neuroscience

Practice II: Data Analysis - Continuous Data

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Exercise 1: Questionnaire (0.5pt)

Q₁ : What information you loose if you choose 300ms window for Fourier transform?

Exercise 2: DFT (0.5pt)

Play discrete Fourier transform on paper

Exercise 3: Frequency Analysis (1.5pt)

In this exercise we ...

Get data from Andero

1. Download and study data, you have two conditions
2. Do Fourier and plot frequency distributions for each condition
3. What difference do you see, why?

Exercise 4*: Exponent (0.5pt)

Estimate the exponent of the slope in the frequency distributions you got in the previous exercise. This is important because...

Exercise 5: Correlation (0.5pt)

Compute correlation between two EEG channels.

Exercise 6: Evoked Potential (0.5pt)

Average over many runs to see that only then stuff becomes visible

Exercise 7: ??? (0.5pt)

Discuss something

Please submit a **pdf** report with answers to the questions and comments about your solutions. Also submit a code for the programming exercise(s). Pack those into **zip** archive and upload to the course web page.