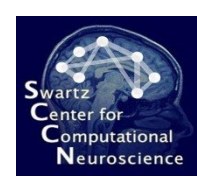# Exercise 4: Scripting Online Analyses in BCILAB

Introduction to Modern Brain-Computer Interface Design

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About

- This is a exercise using the scripting features in BCILAB

- You will be replicating the previous CSP BCI using the toolbox and run through a few standard analyses

Preparation

- Start MATLAB

- To start the toolbox GUI, type:
  cd /your/path/to/exercise_package/bcilab-course; bcilab

Preparation

- **If you get *any* warnings here:** This is most likely because you have things in your MATLAB path that shadow some of BCILAB's own functions – you can temporarily reset your path to the "factory settings" for the duration of a session as follows:
  - Restart MATLAB
  - Go to File/Set Path…
  - Click Default (bottom)
  - Click Yes
  - Optionally save your settings for later

Details

- The calibration set for this task is /your/path/to/exercise_package/ex4/imag.set
- The test set is imag2.set in the same folder
- The script basic_script.m in this folder is your starting point – please fill in the lines for the TODOs
- This data contains imagined movements – it is not the BCI competition data but an in-house recording from TU Berlin
- Info: There are two relevant markers in this set: Presentation of an L stimulus (person shall imagine a left-hand movement) is 'S 1' and presentation of an R stimulus (person shall imagine a right-hand movement) is 'S 2' – note that there are two spaces between the S and the number.