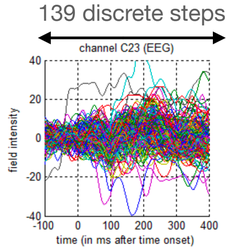
Translational Neuromodelling Project Pipeline (HGF approach)

data dimension

TODO

Preprocessed data



Data exploration

- means, std. deviations, corr. matrices
- compare two patients of diff. / same drug
- look at stable / unstable phases
- is there a time dependence in the features?

139 discrete steps * 1800 tones * 67 EEG channels * patients

Store / Split data (stable, unstable, …)

- create data folders
- split data for phases
- have a good data format we can work with

simple HGF model

Patient data

64 channels

?

- trimming channels
- PCA
- averaging, substract mean?
- topoloigcal mapping

x HGF models

- extend or reduce parameters

6-8 parameters for each HGF

x (HGF models) * y (parameters)

classifier

- SVM
- Regression
- GPs

4 drugs

compare results

time dependence HGF model

Patient data

SAME PIPELINE DIFFERENCES:

x HGF models + time dependence factor

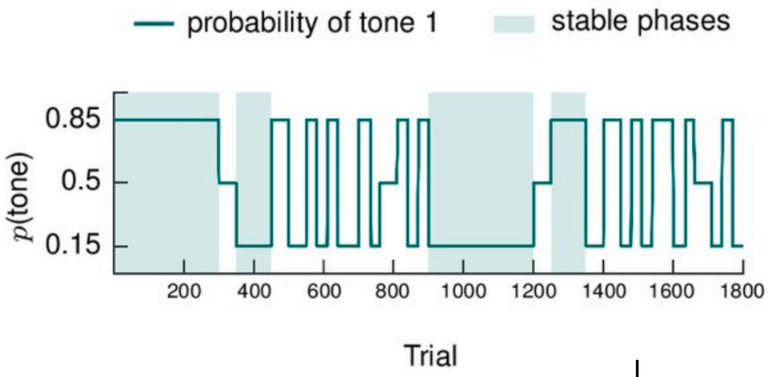
other parameter amount y'

x (HGF models) * y' (parameters)

4 drugs

One Patient

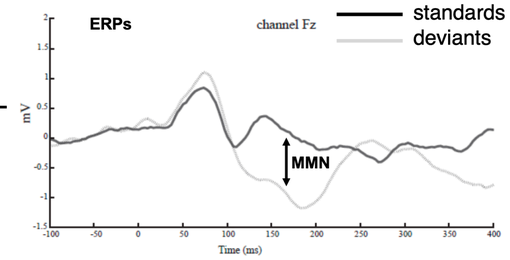
also does that make sense biologically?



?

HGF

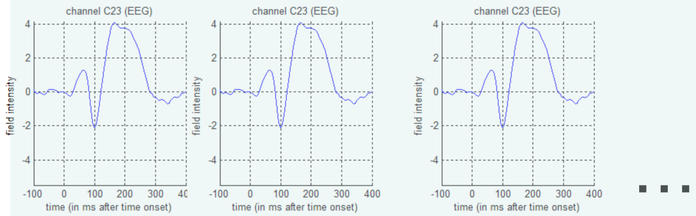
- calculated from phases?
- either one HGF for every phase
- or time-dependent HGF



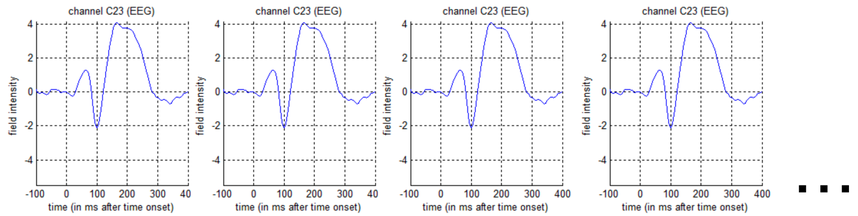
get deviant and standard mean for every phase -> MMN

maybe 8 phases:

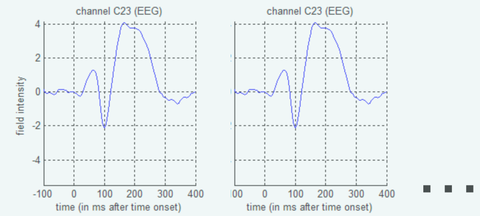
stable phase



volatile phase



stable phase



1800 tones