

## Code Review Checklist

Most important before paper

Important every session

Unclear

<u>Usability</u>	<u>Comments (at least Yes / No)</u>
Is the code easy to install? Are there setup instructions and a list of requirements?	No list of required packages to run Or installation instructions
Is there an example script or a full pipeline that is easy to run and understand?	Unclear, maybe main.m but since there's not data we can't run it
<u>Data preparation</u>	
Are data loading and analysis implemented as separate steps? Ideal: have a data loader class	Done in do_compute_hilbert: Better to call it load_EEG and load_data_behavior.
Is ALL data used available in the cluster	File paths are confusing and not in INM-share/projects
<u>Analysis &amp; Plotting</u>	
Are the different steps of the analysis clearly identified in the README?	Read me as weird name (A_READ_ME.md) make it README.md and add clear instructions
Does the analysis code reflect what is described in the paper? If applicable	n/a
Is it clear what code is used to create each of the figures or panels in the paper?	No. there's one random do_compute_plot.m
<u>Code quality</u>	
Project in periodically updated in github, gitignore, README	no
Project structure: folders: data, notebooks, scripts, figures	no
Is the code well organized (functions, classes, modules, settings, ... as applicable)?	No. There are some functions that are reusable (do_decoding) etc but not well organized.  Easy fix: just create the correct folders and move your functions there.

	<p>There are several versions of the same functions (eg compute_hilber3_v2)</p> <p>Function_decoding folder should be split into decoding functions and plotting</p> <p>Many functions in the middle of main.m -&gt; move them to a separated module</p>
Are all functions and classes documented?	In french!
Are some values hardcoded?	Yes, inside functions -> make them a parameter (e.g. fieldsize)
Can any of the code be replaced by existing packages?	Unclear, no knowledge of matlab
Are there any obvious optimisations that will improve performance?	
Is there any redundant code that should be removed?	<p>Main and decoding_lfp have a lot of overlap: make a couple of functions that can be reused across analyses</p> <p>Several similar functions inside function_decoding: eg do_compute_hilbert_plot_with_statistics_v3.m</p>
Does the code agree with basic style guidelines (e.g. PEP8 for Python)	matlab
Variables names are self explanatory (eg no a, b, c etc)	Some no, opened issue
Are there any passwords in the repo or exposed in the code?	no
Is any identifying information unwittingly exposed?	Not much but maybe hide the paths in a file that you don't update in github