MEG QC pipeline code structure

Module “Functions”

**\_\_init\_\_.py**

**main\_MEG\_QC.py:**

For each subject:

* + Read config **settings.ini**
  + Initial\_stuff(config) -> **data\_load\_and\_folders.py**
    - * load\_meg\_data
      * ~~make\_folders~~
      * Epoch\_meg
  + MEG\_QC\_Measures (config + all outputs of initial\_stuff)
    - MEG\_QC\_RMSE() -> **RMSE\_MEG\_QC.py**
      * Sub functions
      * PSD\_QC() -> **PSD\_MEG\_QC.py**
      * Sub functions
    - MEG\_peaks\_manual() ->
      * Sub functions
    - MEG\_peaks\_auto() ->
      * Sub functions
    - MEG\_EOG() ->
      * Sub functions
    - MEG\_ECG() ->
      * Sub functions
    - MEG\_head\_movements() ->
      * Sub functions
    - MEG\_muscle() ->
      * Sub functions
  + save\_figs\_html() – using ANCP BIDS
  + create\_all\_reports() – using ANCP BIDS

NEW VERSION:

Module “Functions”

**\_\_init\_\_.py**

**main\_MEG\_QC.py:**

Wrap mag\_grad selection into function and do before everything.

save\_derivative\_html() – using ANCP BIDS:

* For each subject:
  + - Make folder for the derivative
    - For every fif (split by sessions, task, runs 🡪 check with layout.get\_entities first which of these entities are present in data! Get the number of ses, loop over them..):
      * Read config **settings.ini (get directory path)**
      * Initial\_stuff(config) -> **data\_load\_and\_folders.py**

load\_meg\_data

~~make\_folders~~

Epoch\_meg

* + - * MEG\_QC\_Measures (config + all outputs of initial\_stuff)
        + MEG\_QC\_RMSE() -> **RMSE\_MEG\_QC.py**

Sub functions

PSD\_QC() -> **PSD\_MEG\_QC.py**

Sub functions

* + - * + MEG\_peaks\_manual() ->

Sub functions

* + - * + MEG\_peaks\_auto() ->

Sub functions

* + - * + MEG\_EOG() ->

Sub functions

* + - * + MEG\_ECG() ->

Sub functions

* + - * + MEG\_head\_movements() ->

Sub functions

* + - * + MEG\_muscle() ->

Sub functions

* + - Write all derivatives for all subjects.