**Analysis procedure and Scripts: EPHYCOS\_YOUNG fMRI sub-study**

**Plus bas: Analyses déjà effectuées + Behavioral data**

**fMRI Analysis – Cerebral activity**

1. **Data Importation**
2. **Data Base**

<https://bbldatacentre.unige.ch/LabNicData/index.php>

First name : EPHYCOS // Last name : Session n° // id : ss 16 – participant juillet 2013

Birth date : Date of session (Ex: 3rd of July 2013)

1. **EPHYCOS Folder**

Import Dicom in folder (D:\Doctorat\EPHYCOS\_YOUNG\Participants\_IRMf\Session1\Données Brutes) Change name + Extract files and Change name again.

1. **Analysis**
2. **Transformation (Dicom -> Nifti)**

(D:\Doctorat\EPHYCOS\_YOUNG\Scripts\_Experiment\Analysis\fMRI\Import Dicom) ***gen\_swr\_import\_DICOM\_EmilieM***

Select the participant folder (Ex: Données brutes) you would like to transform and select the location of the new folder (nifti) (Ex: SPM\_Brut) + Faire une copie dans dossier “SPM” après importation dicom.

1. **Order files and folders**

Files and folder have to be order for the preprocessing and analysis steps.

Each folder should have 4 folders :

* analyse (Folders with the 1st or 2nd analysis)
* autres
* behavior (All the ONS protocol)
* scans (BOLD\_DUAL\_\* ; BOLD\_EMO\_1\_\*; BOLD\_EMO\_2\_\*; BOLD\_FLANKER\_\*; FILED\_MAP\_\*; localizer\_\*; T1; BOLD\_RS\_\*)

In scans: Anatomical scan should be named: “T1”

1. **Preprocessing**

**spm8\_preprocessing\_labnic\_\*\_NF**

(D:\Doctorat\EPHYCOS\_YOUNG\Scripts\_Experiment\Analysis\ fMRI \Preprocessing)

* Realignment (with option to realign on mean or first scan of session) (Aurore: “Est & Res”)
* Coregistration (if structural image exists)
* Slice timing (suggested for TR > 2.5s)
* Normalization (on EPI template with voxel size of [3 3 3]mm for functional images and on T1 template with voxel size of [1 1 1]mm for structural image)
* Smoothing (Gaussian filter of 8 mm).
* First select SPM // Then the participants you would like to preprocess.

Attention! 5 folders are created and should be moved in their own folder task (to not be rewritten)