First steps in Matlab and with SPM.

Get your Matlab running

Test your Matlab

- Open Matlab
- Go to the folder (....\MandM\code) where you have the file mam2019_setup.m
- In your Matlab console type «mam2019_setup» and then enter.



Start SPM

- Type spm fmri and enter in your matlab console
 - This will start SPM

SPM main menu

| SPM12 (6906): Menu – 🗆 🗖 | | | |
|---|-------------------------------|------------------|-------------------|
| Spallal pro proces Realign (Esti. Coregister (| sing Y Slice Y Normalis | timing se (~ | Smooth Segment |
| Model specification, review and estimation Specify 1st-level Review | | | |
| Specify 2nd-level | | Estimate | |
| Inference Results | | | |
| Dynamic Causal Modelling | | | |
| SPM for functional MRI | | | |
| Display | Check Reg | Render | - Y FMRI Y |
| Toolbox: 🗸 | PPIs | ImCalc | DICOM Import |
| Help | Utils Y | Batch | Quit |
| Copyright (c) 1991,1994-2016 | | | |

Useful tools

• Display:

- Try to display the image skstruct.nii in the data folder
- Play around with the different options on the graphics window.
- Do the same for fmri01.nii,1
- Check Reg
 - Press and select both the skstruct.nii and the fmri01.nii,1
 - What do you observe.
 - Try to do an outline. Right click on one image and select outline.



Calculation

- Use the ImCalc tool to compute some «interesting things from the images.
 - E.g. mean of the 11 fmri01.nii images, thresholded image, etc. be creative. What could be an interesting thing to look at?
 - For example the difference between the first and the last of the 11 fMRI images. fmri01.nii,1 and fmri01.nii,11 (Note: These are only a subset of the fMRI images of one run.)