PPVOL2 fMRI

*fMRI recordings*

Subjects performed the fMRI and MEG task in random order. BOLD signals were measured using a3-T Siemens trio TIM 32 channels. Two types of blocks were presented to the subject alternatively. In the retinotopic meridian type of block, participants fixated and viewed standard meridian mapping stimuli (Tootell et al, 1995), comprising flickering checkerboards wedges presented along the horizontal and vertical meridians (Sergent et al 2011). We collected two to three runs of 167 (?) volumes per participant, with 36 slices covering the occipital cortex and TR=2.130sec, using a gradient-recalled EPI sequence (2x2x2 (?) mm voxels). Periods of horizontal meridian stimulation, rest and vertical meridian stimulation alternated in blocks of 10 (?) volumes each. In the within-quadrant “localizer” type of block, participants fixated centrally while viewing two gratings on the diagonal, the same as presented during the MEG experiment. This allowed us to isolate within each hemisphere, the regions of V1 and V2, responding specifically to each grating patch. We collected two to three runs of 167 (?) volumes per participant, using the same fMRI sequence. The two diagonal presentations alternated in blocks of 3 (?) volumes each. The orientations of each of the two gratings in each display varied from block to block independently. In both types of blocks, the subjects had to perform a central task that consisted in counting the number of white dots (random at each block) that appeared on the fixation point. This helped subjects fixating and very few dots were missed (cf. Doc excel Ages\_Sujets). + sequences EPI et T1.