RESTING STATE fMRI

* Patient not stimulated in this fMRI
* Study the functional connectivity of the brain

TASK BASED fMRI

* Patient is stimulated

N-Backed Tasks

A common paradigm to assess Working Memory is the so-called *n*-back task. In the *n*-back task participants are presented a series of visual stimuli. They are asked for each stimulus whether it matches a stimulus *n* trials before. For example, in a 2-back task, in which the trials consist of letters, participants have to decide whether the current letter is the same as the letter in trial *n* – 2. The task requires a cascade of cognitive processes: the task requires encoding and a temporary storage of each stimulus *n* of the stimulus sequence in WM and a continuous updating of incoming stimuli. At the same time, irrelevant items have to be inhibited and the currently irrelevant items abandoned from WM.