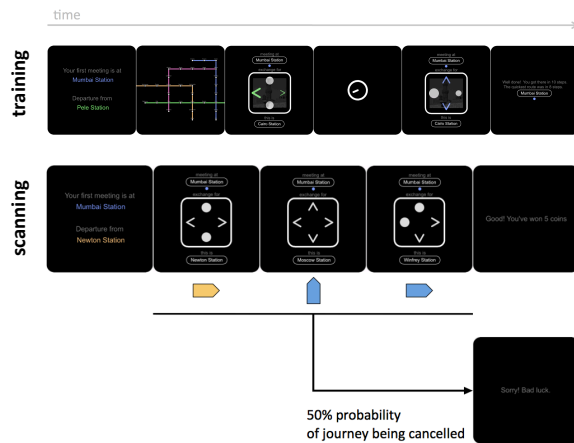
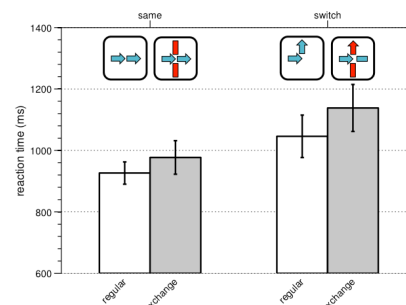


# SUBWAY



**Figure 1. Task design**

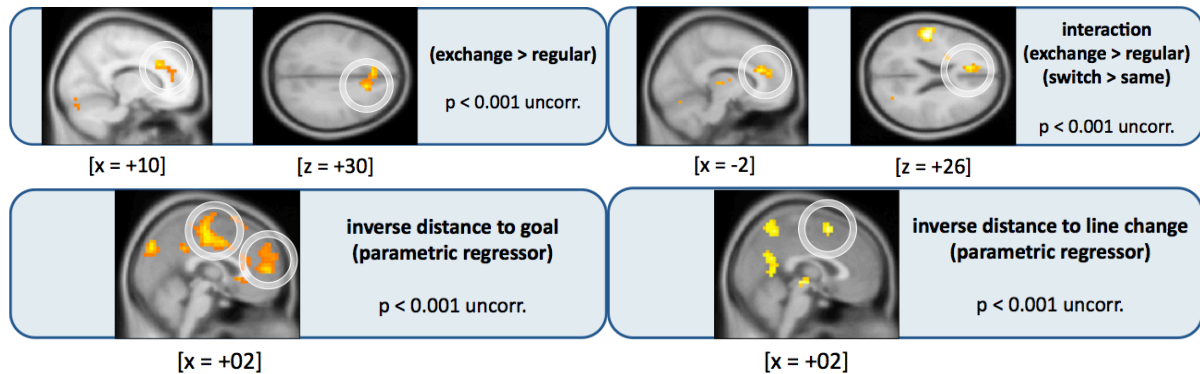
Participants performed two sessions : one outside the scanner (learning the map of a subway network) and one inside the scanner.



Main effect (regular / exchange):  $F(1.00,15.00) = 6.763$ ,  $p = 0.020$   
 Main effect (same / switch):  $F(1.00,15.00) = 15.438$ ,  $p < 0.001$   
 Interaction:  $F(1.00,15.00) = 1.131$ ,  $p = 0.304$

**Figure 2. Behavioural results**

There is a behavioural cost (i.e. slowing down) of decision-making in exchange stations (when there are more options) and when we change of action. These two costs don't interact.



**Figure 3. Neural results (GLM analysis)**

We modeled the BOLD signal using standard HRF functions over the relevant events in our experiment. A GLM analysis over the whole brain showed a main effect of *currently being in an exchange station* in the *Anterior Cingulate Cortex* (ACC). This activation interacted with *line change* (higher when changing). Additionally, we also found BOLD signal correlating with *inverse distance to goal* in both the *ventromedial PFC* and the *dorsomedial PFC*, and with *inversed distance line change* only in the *dmPFC*.