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Neural Representation of Selective Auditory Attention in fMRI

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Preprocessing Raw fMRI data Realignmen Normalizatio Feature vector β -maps Feature vectors Condition ' β -maps

Superior parietal lobule (SPL) carries strong information about spatial attention - including its direction!

Representational Dissimilarity Spatial v.s. Talker Talker v.s. Passive Spatial v.s. Passiv Matrices Classifier Performance in Percentile 0.05 -0.05



Representational Dissimilarity Matrices Talker



- theory based interpretation.

4. Representational Similarity Results



*Regions of interest (ROIs) are defined in Destrieux⁶

Searchlight Between-Within Category Difference (Accuracy)

Intra-parietal sulcus (IPS) shows similar patterns to SPL.

Searchlight Between-Within Category Difference (Accuracy)

• Try more different dissimilarity measurements and give a information

• Perform whole-brain searchlight analysis.

• Verify the conclusion with statistical tests.

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