

## CIBM Annual Symposium 2022 Campus Biotech, Geneva | 30th November

## THE NEURAL ORGANIZATION OF EMOTION EXPERIENCE DURING FILM

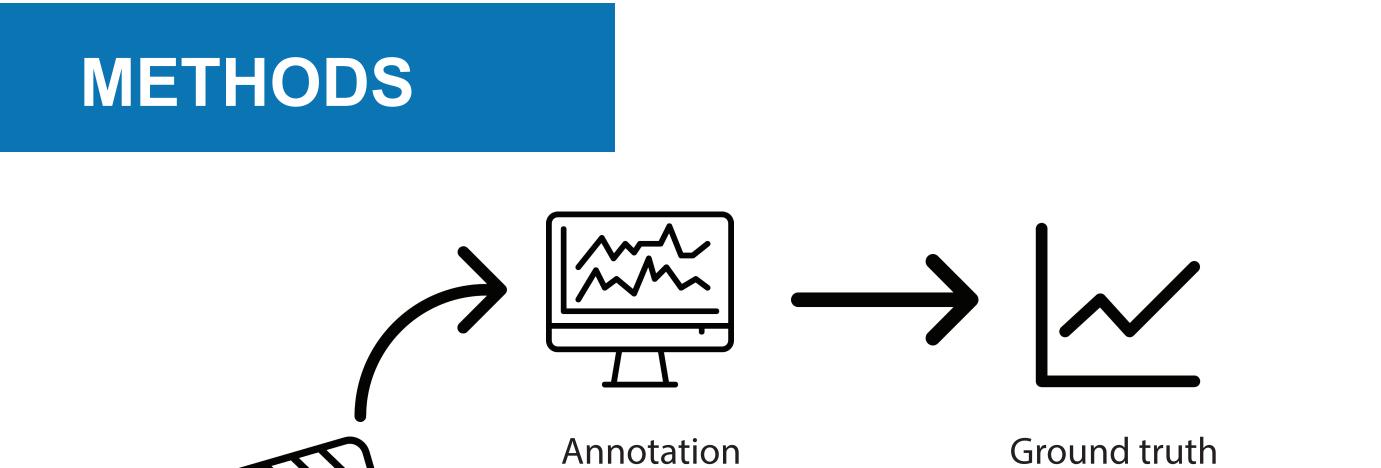
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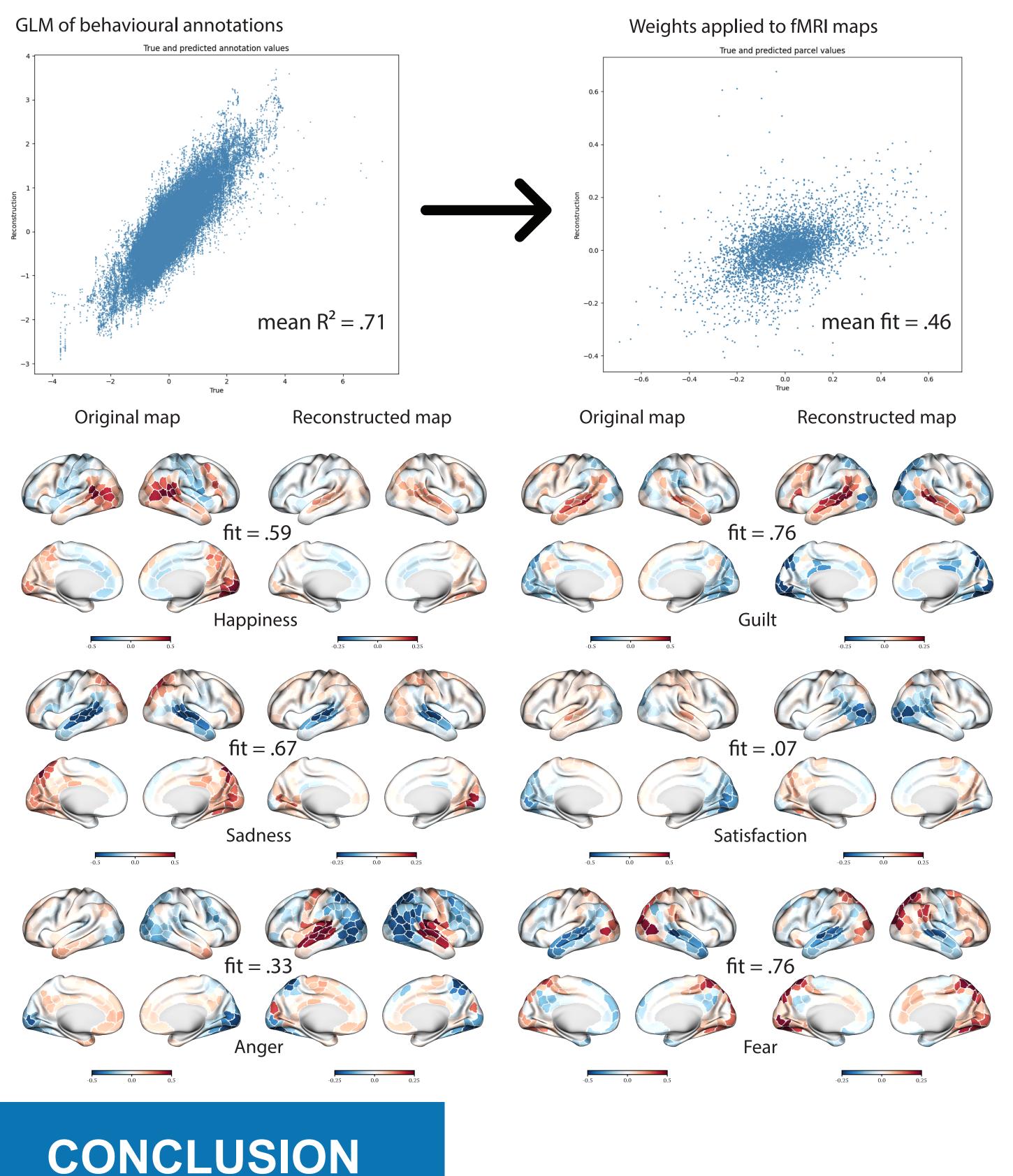


## MAIN RESULT

- Understand neural organization of emotion
- Explore evidence for discrete versus componential acounts of emotions
- Applying a multimodal approach including behavioural and fMRI measurements



- Annotations of emotion components predict discrete emotions
- Coefficients from annotations generalize to fMRI to reconstruct discrete emotion maps

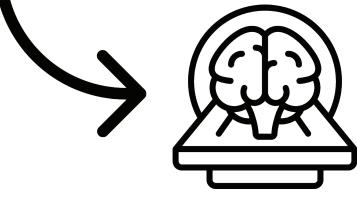


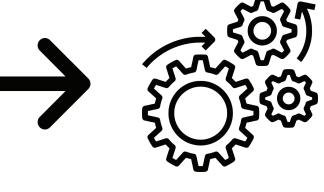


43 participants

 $\geq$  3 ratings

14 short films





fMRI Acquisition 30 participants

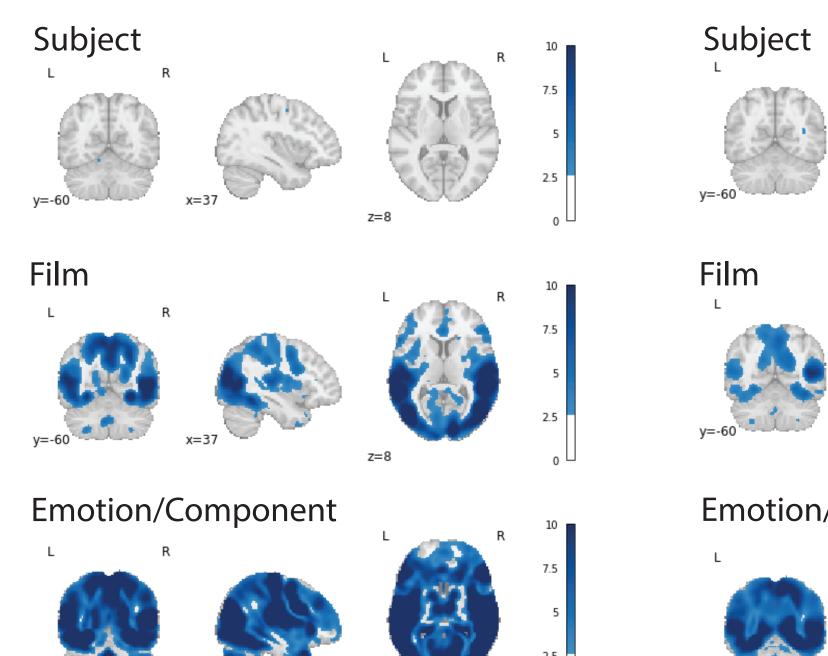
Standard fsl Preprocessing

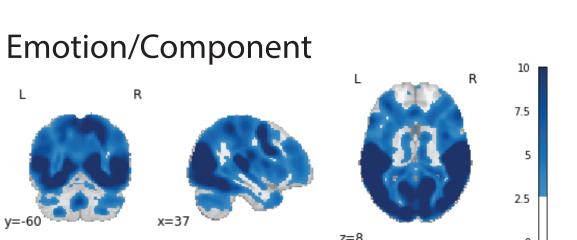
- Ridge Regression to extract brain maps for each subject x film x emotion
- Reconstruction of brain maps for discrete emotions based on components

**F-TEST** 

**Discrete Emotions** 







• Film fMRI captures rich variance related to emotion experience Relationship between emotion components and discrete emotions generalizes across samples and modalities Important contribution towards understanding the neural organization of emotion in the brain

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