

# “CMB Cross-correlation WG”

## Updates on cross-correlation with tSZ

N. Aghanim on behalf of

M. Douspis, G. Fabbian, F. Bianchini, J. Grain, M. Langer, H. Tanimura\*, V.  
Bonjean\*, ...

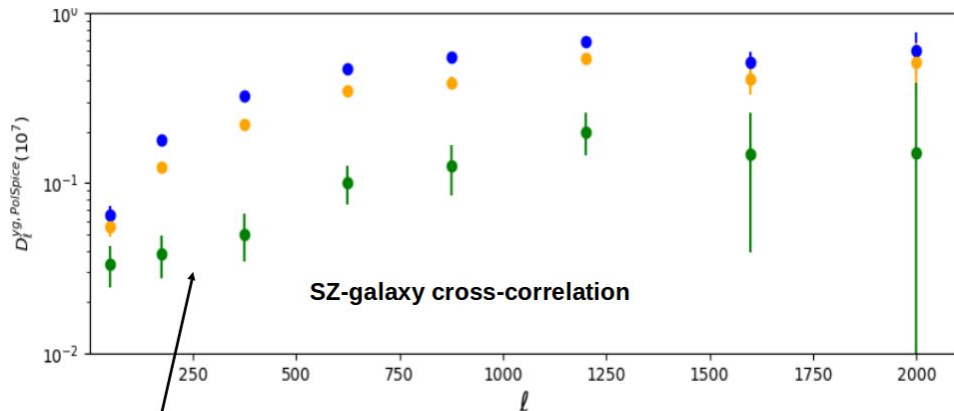
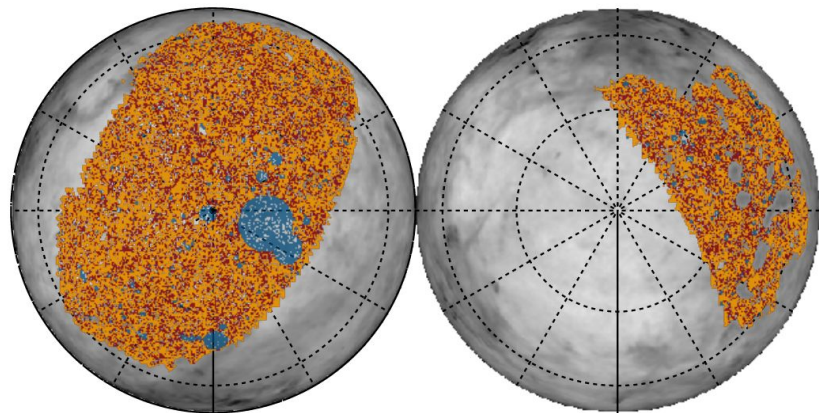
# tSZ-galaxy X-correlation estimators

Auto and cross-spectra

→ Estimators adapted from CMB developments (PolSpice (Sapudzi+ '01), MASTER (Hivon+ '05))

Application to actual data →

Cross-correlation tSZ-galaxies measured for WISExCOSMOS catalogue and Planck tSZ map with masked regions



People: Aghanim, Fabbian, Bianchini, Douspis, Grain, ...

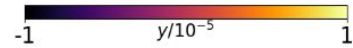
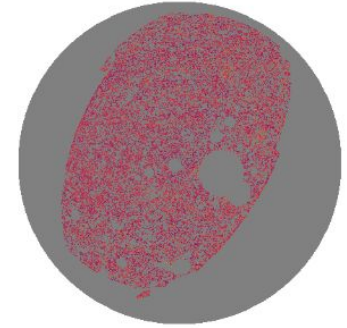
Masked groups & clusters

# tSZ-galaxy X-correlation estimators

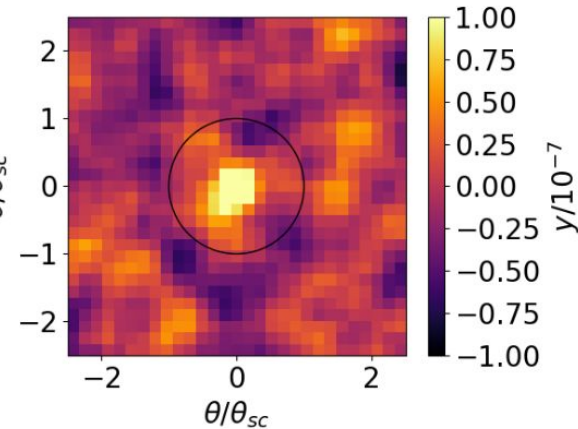
Real space tools

→ Stacking superclusters & filaments (null tests, bootstrap resampling for errors)

Application to actual data → Stacking of superclusters and filaments detected in SDSS in Planck tSZ map with masked regions



tSZ signal from SC



**END**