

# A joint Planck and SPT-SZ measurement of CMB lensing cluster masses

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We present the first CMB-lensing galaxy cluster mass measurement using a combination of ground and space-based surveys (SPT-SZ and Planck). We measure the signal at 4.8 sigma, a significant gain with respect to measurements performed on the two individual datasets. In particular, we show that we take advantage of correlations between the scales observed by SPT-SZ and the scales observed by Planck to improve the constraints on the lensing potential. This result demonstrates that Planck data will remain a key element in CMB-lensing cluster studies for decades to come.

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