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Abstract for an Invited Paper for the APR13 Meeting of the American Physical Society

The Planck Lensing Map

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The high-resolution CMB fluctuations measured by the Planck satellite are perturbed by gravitational lensing, primarily sourced by the structure of the Universe on very large scales (>30Mpc comoving) at relatively high redshifts (z 2). We have exploited the distinct statistical signatures of this effect to construct a projected, full-sky map of the the large-scale dark matter distribution, as well as an estimate of the lensing potential power spectrum. This talk will detail our measurement, as well as its implications for cosmology.

¹for the Plank Collaboration