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## **A 'variable' gravitational constant and consequence on cosmology.**

Constraints on the cosmological concordance model parameters are usually obtained using the locally measured value of the gravitational constant  $G$ . Here we relax this assumption and determine the impact of such hypothesis on the physics involved in the prediction of the cosmological observables. Using the latest CMB temperature and polarization correlations data and distance measurements from galaxy clustering, we update the constraints on  $G$  along with the other main cosmological parameters. We also show the impact of a variable  $G$  on the latest discrepancies found on the Hubble and the  $\sigma_8$  parameter.

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