

Testing significance of the large angular scale CMB anomalies

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Studies of the statistical properties of the CMB maps at large angular scales gives a unique opportunity to pose important questions about very fundamental assumptions made in the standard cosmological model such as statistical isotropy and Gaussianity of the initial fluctuations. Since the COBE and WMAP data releases, considerable effort has been spent on testing these properties. Remarkably, this effort has resulted in several reports of a breaking of statistical isotropy, as established by many qualitatively different methods. Recently, these observations has been confirmed for the Planck temperature data. I will present studies of the anomalies for the 2018 Planck polarisation maps and prospects of testing the anomalies using Ali CMB Polarisation Telescope data.

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