



Non Gaussian extrema counts for CMB maps

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In the context of the geometrical analysis of weakly non Gaussian CMB maps, the 2D differential extrema counts as functions of the excursion set threshold is derived from the full moments expansion of the joint probability distribution of an isotropic random field, its gradient and invariants of the Hessian. Analytic expressions for these counts are given to second order in the non Gaussian correction, while a Monte Carlo method to compute them to arbitrary order is presented. Matching count statistics to these estimators is illustrated on fiducial non-Gaussian "Planck" data.

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