

DE MADRID AL COSMOS

CMB: beyond the standard statistical scenario

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Fecha:

Viernes, 09 de enero
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Lugar:

Sala de Conferencias
CFMAC (CSIC), c/ Serrano, 121

Abstract: In this talk I will review the basic hypotheses which motivate the statistical framework used to analyze the cosmic microwave background radiation (CMB), and discuss how that framework can be enlarged as we relax those hypotheses.

In particular, I will try to separate as much as possible the questions of gaussianity, homogeneity and isotropy from each other, while giving particular emphasis to their signatures and the enhanced "cosmic variances" that become increasingly important as our putative Universe becomes less symmetric.

After reviewing the basic formalism I will present a few model-independent statistical tests, including some new results, which can be applied to CMB data when searching for large scale "anomalies".