Using Minkowski Functionals to analyze CMB weak lensing

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Minkowski Functionals are a set of descriptors, which can be used to describe the morphological structures of a map. Unlike the power spectrum, they intrinsically contain higher order correlations information. CMB weak lensing, a powerful probe of the early universe and cosmological parameters. Imprinting projective information of large-scale structures all the way back to the last scattering surface. In this talk, I will discuss the feasibility of Minkowski Functionals to constrain cosmological parameters, when apply them on CMB lensing potential maps.

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