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## The relativistic galaxy bispectrum

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The galaxy bispectrum will play an important role for future galaxy surveys. On large scales it will be a key probe for measuring primordial non-Gaussianity, and hence help discriminate between different inflationary models and other theories of the early universe. On these scales, a variety of relativistic effects come into play once the galaxy number-count fluctuation is projected onto the past light cone. The Fourier-space galaxy bispectrum is complex, with the imaginary part arising from leading-order relativistic corrections. Detection of the imaginary part is potentially a smoking gun signal of relativistic contributions. We will discuss whether next-generation surveys could make such a detection. Further, We will discuss the decomposition of the bispectrum into invariant multipoles about the observer's line of sight, and examine in detail how the relativistic effects contribute to these.

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