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# Light Particles with Spin in Inflation

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The existence of light particles with spin during inflation is prohibited by the Higuchi bound. This conclusion can be evaded if one considers states with a sizeable coupling with the inflaton foliation, since this breaks the de Sitter isometries. The action for these states can be constructed within the Effective Field Theory of Inflation, or using a CCWZ procedure. Light particles with spin have prescribed couplings with soft inflaton perturbations, which are encoded in consistency relations. I will talk about the phenomenology of light states with spin 2. These mix with the graviton changing the tensor power spectrum and can lead to sizeable tensor non-Gaussianities. They also give rise to a scalar bispectrum and trispectrum with a characteristic angle-dependent non-Gaussianity.

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