

JOINT TUFTS/MIT COSMOLOGY SEMINAR

*SUSY Rilles: A Speculation on Superstring
Signatures in the Cosmic Microwave
Background*

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We speculate about the imprint of higher spin supermultiplets on cosmological correlators, i.e., the non-Gaussianity of the cosmic microwave background. Supersymmetry is used as a guide to introduce the contribution of fermionic higher spin particles, which have been neglected thus far in the literature. We compute the curvature perturbation 3-point function for supersymmetric higher-spin particle exchanges and find the known $P(\cos)$ angular dependence is accompanied by superpartner contributions.

Tuesday, October 29, 2019, 2:30 pm
Cosman Seminar Room
Center for Theoretical Physics
Building 6C, Room 6C-442
Massachusetts Institute of Technology
Refreshments at 2:00 in the same room