

Neutrino properties from high-resolution CMB experiments

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Cosmological observations are sensitive to the sum of neutrino masses and the number of light relativistic species in the early universe. In particular, high-resolution measurements of the cosmic microwave background (CMB) are approaching the sensitivity required to rule out an inverted neutrino hierarchy. Through parallel probes including lensing of the CMB and the counting of galaxy clusters, planned CMB experiments will be sensitive enough to detect the minimal neutrino mass scale. I will review the assumptions behind this claim and describe the progress being made by the Atacama Cosmology Telescope, a high-resolution ground-based CMB experiment.

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