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Sensitivity of cosmological data to the neutrino mass hierarchy

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Present measurements are not able to firmly single out nature's choice for the neutrino mass hierarchy. Consequently, in the absence of a robust measurement of the neutrino mass ordering, a desirable bound on the neutrino mass would be one which relies on the less informative possible assumption about the hierarchical distribution of the total mass among the three eigenstates. We will discuss a novel method to quantify the sensitivity of cosmological data to the neutrino mass hierarchy in the context of Bayesian analysis.

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