APR09-2009-000717

Abstract for an Invited Paper for the APR09 Meeting of the American Physical Society

The State of the Neutrino Mass Spectrum

MORGAN WASCKO, Imperial College London

The discovery of neutrino flavor oscillation has definitively shown that neutrinos have non-zero mass, in contradiction to the Standard Model of particle physics. However, oscillation experiments can only reveal the differences between the mass states, not the absolute values of the masses. A full understanding of neutrino mass requires a broad suite of experiments. Measuring the absolute mass values of neutrinos is of fundamental importance to particle physics, astrophysics and cosmology. In this talk, we will review the current state of neutrino mass measurements from neutrino oscillation experiments, beta decay endpoint experiments and neutrinoless double beta decay searches.