

Long-baseline neutrino oscillations

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Long-baseline neutrino experiments use neutrino beams produced at accelerators to study the oscillation of neutrino flavours as they traverse hundreds of kilometers between the primary beam target and a far detector. Current long-baseline experiments have the world's best sensitivity to the neutrino mixing angle θ_{23} and the mass splitting Δm^2_{32} . They additionally provide the only available data about the complex phase of the PMNS matrix that is a source of CP violation in the neutrino sector. In this review talk I will examine the methodology and results from long-baseline experiments and discuss future prospects.

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