

Abstract for an Invited Paper
for the TS4CF08 Meeting of
The American Physical Society

Neutrino Oscillations: an Overview

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The phenomenon of neutrino oscillations will be reviewed. Background on neutrinos, flavor, flavor conservation, and oscillations will be presented. The experiments that demonstrate oscillations and their role in determining the oscillation parameters will be described. Some recent results that arise from a new analysis tool that incorporates the full three neutrino oscillation probabilities and a full three neutrino treatment of the interaction with the Earth's matter will be given. The small mixing parameter θ_{13} is found to be $-0.07^{+0.18}_{-0.11}$. Note that it is (statistically insignificantly) negative, a region of parameter space often overlooked, and that the errors are asymmetric arising from linear terms in the oscillation probabilities previously ignored. Since θ_{13} determines the size of possible CP violation and the size of effects that distinguish the mass hierarchy, it is of particular importance. Some thoughts on the future will be given.