Abstract for an Invited Paper for the HAW05 Meeting of The American Physical Society

Measuring the Neutrino Matrix

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I will review the next steps for measuring the remaining parameters for the MNS matrix, which we hope will ultimately lead to the first observation of leptonic CP violation. The next obvious experiments are reactor and long-baseline accelerator experiments; these will first go after a measurement of non-zero θ_{13} . Long baseline experiments can exploit matter effects to learn about the mass hierarchy. A possibility which sometimes gets less attention is the potential for gaining information via the observation of supernova neutrinos; I will explore what a Galactic supernova could add to the game.