

establish CP violation is demanding but doable. As such, that effort will also provide precision measurements of all parameters of 3 generation neutrino mixing as well as a sensitive probe of "new physics" effects from sterile neutrinos, extra dimensions, possible dark energy effects etc. Since neutrinos only interact weakly, new physics that affects how particles interact is more likely to be detected in the neutrino sector. Unfolding the neutrino mass ordering via matter effects should be a straightforward byproduct. Second, CP violation has, so far, only been observed in the quark sector of the Standard Model. Discovery in the leptonic sector should shed additional light on the role of CP violation in Nature. Is it merely a consequence of inevitable phases in mixing parameters or something deeper? Perhaps, most important, unveiling leptonic CP violation is a particularly compelling goal because of its potential connection with the observed matter-antimatter asymmetry of our Universe, a fundamental problem at the heart of our existence. The leading explanation is