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Precision Studies of Reactor Neutrinos: International Collaborations for Discovery Science KARSTEN HEEGER, Yale University

Reactor neutrino experiments have played a key role in the discovery and precision study of neutrino oscillations. The KamLAND reactor experiment in Japan made the original discovery of reactor neutrino oscillation and confirmed neutrino flavor change with terrestrial neutrinos. Subsequently the Daya Bay experiment in China made a precision measurement of the last unknown neutrino mixing angle opening the path to search for CP violation in the lepton sector. Following the success of Daya Bay an ambitious new reactor neutrino experiment, JUNO, is now under construction in China to determine the neutrino mass ordering. International collaborations and partnerships have played a key role in the recent discoveries in neutrino physics. This talk will survey recent results and discuss the role of international partnerships in enabling fundamental and applied reactor neutrino science.