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Lepton flavor violation and neutrino mass

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In order to explore the neutrino mass matrix, we need to examine the Majorana nature of neutrino. The Majorana nature is explored through the lepton number violating processes such as the neutrino-less double decay, the conversion of muon to positron, muon to anti-muon, etc. In these processes, the Majorana CP phases play an important role. The neutrino mass matrix is most likely to arise through the see-saw mechanism. To explore this, we need to examine the leptogenesis and the lepton flavor violation processes as well. By combining all possible experiments, the neutrino mass matrix is discussed.