Abstract

Neutrino mass matrix adds nine new parameters to the SM: 3 mass eigen-values, three mixing angles and three CP-violating phases. So far only four of these parameters have been measured while upper bounds on two more parameters have been established. However the three CP-violating phases are so far completely unconstrained. To determine these parameters, different theoretical conjectures have been postulated, including the $\mu-\tau$ symmetry. In this talk we review this symmetry and propose a new variant of it which has interesting phenomenological implications.