



Wednesday 6 July, 14:25 – 14:50

Session 11: Theory of neutrino mass, mixing, CP-invariance violation and leptogenesis

**Theory of leptonic flavor mixing**

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Why neutrino masses are so small? Why lepton mixing angles are completely different from quark mixing angles? What is the origin of the hierarchy in the fermion mass spectrum? I review the main tools made available by the general framework of quantum field theories to make predictions about fermion masses and mixing angles, focusing on the neutrino sector and on the experimental tests of the different ideas.