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Neutrino Mass Spectrum, Majorana CP-Violation, $\beta\beta$ -Decay and Beyond SERGUEY PETCOV, SISSA/INFN, Trieste, Italy

The problem of determination of the nature - Dirac or Majorana, of massive neutrinos is discussed. The physics potential of experiments, searching for $\beta\beta$ -decay, for providing information on the type of ν -mass spectrum, absolute scale of ν - masses and on the Majorana phases in the PMNS neutrino mixing matrix U, is reviewed. The possibility that the CP-violation necessary for the generation of the baryon asymmetry of the Universe is due exclusively to the Majorana CP-violating phase(s) in the PMNS neutrino mixing matrix U, is also briefly discussed.