

Predictions of m_{ee} and neutrino mass from a consistent Froggatt-Nielsen model

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The seesaw mechanism is the most attractive mechanism to explain the small neutrino masses, which predicts the neutrinoless double beta decay ($0\nu\beta\beta$) of the nucleus. Thus the discovery of $0\nu\beta\beta$ is extremely important for future particle physics. However, the present data on the neutrino oscillation is not sufficient to predict the value of m_{ee} as well as the neutrino mass m^i . In this talk, by adopting a simple and consistent Froggatt-Nielsen model, which can well explain the observed masses and mixing angles of quark and lepton sectors, we calculate the distribution of m_{ee} and m^i . Interestingly, a relatively large part of the preferred parameter space can be detected in the near future.

Paper info

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