Contribution ID: **80** Type: **Invited Talk**

Recent results and perspectives on beta decay, double beta decay and lepton flavour violation

Monday, 24 February 2020 09:00 (30 minutes)

The lepton sector of the Standard Model is a very important and interesting field to search for new physics beyond the standard model. As we know that quarks and neutrinos are mixing it is an open question why the charged leptons are now. This stimulates the search for charge lepton violation (CLFV). In addition, neutrinoless double beta decay would violate total lepton number by 2 and prove that neutrinos are their own antiparticle. The obtained half-life can be linked to a potential Majorana neutrino mass. This is providing a complementary measurement to normal beta decay where new interesting results are obtained.
This talk will shortly review the current situation in this area of research, required support from theory and an outlook into the future.

Primary author: ZUBER, Kai (Technical University Dresden)

Presenter: ZUBER, Kai (Technical University Dresden)

Session Classification: Invited Talks

Track Classification: Invited Talk