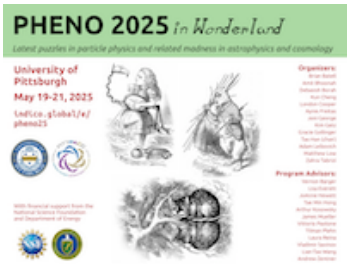

Contribution ID: **125** Type: **not specified**

Probing dark matter –neutrino interaction from the double beta decay at PandaX

Tuesday 20 May 2025 14:45 (15 minutes)

The neutrinoless double beta decay experiments not only give great prospects for us to understand the nature of neutrinos, but also a efficient way to test the dark matter –neutrino interactions. We analyze the double beta decay data at PandaX to probe the dark matter –neutrino interaction. We compute the nuclear matrix element with the presence of this new interaction. We found that the nuclear matrix element for double beta decay with massive dark matter emission differs significantly from the standard one. The latest data from PandaX put a stringent bound on the parameter space of the light mediator scenario at the mediator mass around 1 MeV.

Mini Symposia (Invited Talks Only)

Plenary (Invited talks only)

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