Contribution ID: **827** Type: **Talk**

Atmospheric Neutrino Oscillation with Super-Kamiokande

Thursday 30 July 2020 09:45 (15 minutes)

We will present updated results on three-flavor atmospheric neutrino oscillation from the Super-Kamiokande experiment, covering the 373 kt-year exposure of Super-K I through IV. Atmospheric neutrinos cover a wide energy range, are comprised of both neutrinos and antineutrinos, have both electron and muon flavors, oscillate into a significant tau neutrino component, and experience matter effects in the earth. Through a detailed 3-flavor analysis this data is sensitive to the neutrino mass hierarchy, the octant of theta-23, and the CP-violating phase as well as beyond the standard model interactions. The data analysis presented has been updated to include improvements in event reconstruction and modeling of neutrino-nucleus interactions.

I read the instructions

Secondary track (number)

Presenter: TAKHISTOV, Volodymyr

Session Classification: Neutrino Physics

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