



Contribution ID: 588

Type: Poster

Is there any "LSND anomaly"?

The LSND Collaboration reported a 3.8 sigma excess of $\bar{\nu}_e$ over background, in an experiment that dumped 800 MeV protons into a water target. They interpreted this excess as evidence for $\nu_{\mu} \rightarrow \bar{\nu}_e$ oscillations, which led to the suggestion of 'sterile' neutrinos. LSND's claim was not confirmed by the MiniBooNE Collaboration, yet the origins of the LSND result were never clarified. In this talk, data from the HARP-CDP group on pion production by 800 MeV protons are presented. These data are used in a new Monte Carlo simulation of the LSND experiment and result in a new background estimate of the LSND signal.

Primary author: Mr ZHEMCHUGOV, Alexey (Joint Inst. for Nuclear Research (JINR)-Unknown-Unknown)

Presenter: Mr ZHEMCHUGOV, Alexey (Joint Inst. for Nuclear Research (JINR)-Unknown-Unknown)

Track Classification: 07 - Neutrinos