

Search for heavy neutral lepton production at the NA62 experiment

Tuesday, July 28, 2020 8:45 PM (15 minutes)

Searches for heavy neutral lepton production in $K^+ \rightarrow e^+N$ and $K^+ \rightarrow \mu^+N$ decays using the data set collected by the NA62 experiment at CERN in 2016-18 are presented. Upper limits on the elements of the extended neutrino mixing matrix $|U_{e4}|^2$ and $|U_{\mu4}|^2$ are established at the levels of 10^{-9} and 10^{-8} , respectively, improving on the earlier searches for heavy neutral lepton production and decays in the kinematically accessible mass range.

I read the instructions

Secondary track (number)

03

Primary author: GOUDZOVSKI, Evgueni

Presenter: GOUDZOVSKI, Evgueni

Session Classification: Neutrino Physics

Track Classification: 02. Neutrino Physics