

Abstract Submitted
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Search for heavy neutral lepton production at the NA62 experiment MICHELE CORVINO¹, CERN, NA62 COLLABORATION² — 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.

¹The abstract is submitted by P. Cenci, chair of the Conference Committee of the NA62 experiment at CERN. If it will be accepted as a talk, a different presenting author will be appointed as a speaker by the NA62 collaboration.

²<https://na62.web.cern.ch/>

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