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Searching for Dark Matter Annihilation into Neutrinos with Super-Kamiokande

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This work presents indirect searches for dark matter (DM) as WIMPs (Weakly Interacting Massive Particles) using neutrino data recorded by Super-Kamiokande from 1996 to 2014. The results of the search for WIMP-induced neutrinos from the Sun and the Milky Way are discussed. We looked for an excess of neutrinos from the Sun/Milky Way compared to the expected atmospheric neutrino background. Event samples including both electron and muon neutrinos covering a wide range of neutrino energies (GeV to TeV) were used, with sensitivity to WIMP masses down to tens of GeV. Various WIMP annihilation modes were taken into account in the analyses.

Oral or Poster Presentation

Oral

Primary author: FRANKIEWICZ, Kasia (National Center for Nuclear Research, Poland)

Presenters: FRANKIEWICZ, Kasia (National Center for Nuclear Research, Poland); FRANKIEWICZ, Katarzyna (National Centre for Nuclear Research)

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