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Cosmogenic background suppression in ICARUS using a Time-of-Flight Method[1] BISWARANJAN BEHERA, Colorado State University, ICARUS COLLABORATION — The ICARUS detector will operate at shallow depth and therefore it will be exposed to the full surface flux of cosmic rays. This poses a problematic background to the electron neutrino appearance analysis. A direct way to suppress this background is to surround the cryostat with a detector capable of tagging incident cosmic muons with high efficiency (95%). A cosmic ray tagger (CRT) has been produced based on extruded organic scintillator, wavelength-shifting fibers, and silicon photomultipliers and multi-anode photomultiplier tubes. The system is about 70

[1]DOE

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