Abstract Submitted for the APR05 Meeting of The American Physical Society

**RICE bounds on cosmogenic neutrino fluxes and interactions** SHAHID HUSSAIN, DOUGLAS MCKAY, University of Kansas — Assuming standard model interactions we calculate shower rates induced by cosmogenic neutrinos in ice, and we bound the cosmogenic neutrino fluxes using RICE 2000-2004 results. Next we assume new interactions due to extra- dimensional, low-scale gravity (i.e. black hole production and decay; graviton mediated deep inelastic scattering) and calculate enhanced shower rates induced by cosmogenic neutrinos in ice. With the help of RICE 2000-2004 results, we survey bounds on low scale gravity parameters for a range of cosmogenic neutrino flux models.

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Date submitted: 25 Feb 2005

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