

One to ten cubic kilo meter neutrino detector for extremely high energy neutrino

N. Takahashi¹ and A. Misaki²

¹Faculty of Science and Technology, Hirosaki University

²Research Institute for Science and Engineering, Waseda University

Abstract. The high and extremely high energy muon neutrino fluxes of several types of AGN for 10^3 GeV to 10^{12} GeV are obtained by exact neutrino interaction cross section and exact range-energy relation in which fluctuation effect is rigorously taken into account in one to ten cubic kilo meter detector in the

lake or deep sea. The calculations are carried out by the most exact Monte Carlo method

Correspondence to: N. Takahashi (taka@cc.hirosaki-u.ac.jp)