

Extremely high energy neutrino detection by the Telescope Array

S. Yoshida

Institute for Cosmic Ray Research, University of Tokyo, Chiba 277-8582, Japan

Abstract. The Telescope Array detector (TA) which aims at measuring air showers induced by Extremely High Energy (EHE) cosmic rays by the air fluorescence has also capability of detecting EHE cosmic neutrinos. The fine resolution of geometry of air showers makes it possible to identify deeply penetrating down-ward showers and upgoing showers induced by EHE neutrinos. We show the expected sensitivity

for detection of cosmic neutrinos with energies beyond 10^{19} eV which interact in air or rock initiating those anomalous air showers.

Correspondence to: S. Yoshida
(syoshida@icrr.u-tokyo.ac.jp)