Upper limit on the diffuse flux of UHE neutrinos using the Pierre Auger Observatory

CLAUDIA FRACCHIOLLA, None — The Pierre Auger Observatory is the largest ultra-high energy cosmic ray detector. It provides a laboratory for studying fundamental interactions at energies well beyond those available at colliders. In addition to hadrons and photons, the Auger Observatory is also sensitive to ultra-high energy neutrinos. Measuring the flux of cosmogenic neutrinos provides crucial information about the transition point between Galactic and extragalactic cosmic rays. In this talk, I will present the sensitivity of the fluorescence detector of the Auger Observatory to electron neutrinos in the EeV energy range, and the upper limit on the diffuse flux extracted from these data.