

## **PRIMARY NUCLEON SPECTRUM AT THE KNEE AND NEUTRINO ASTROPHYSICS EXPERIMENTS**

**O.G. Ryazhskaya** (1), Oscar Saavedra (2), L.V. Volkova (1)

(1) Institute for Nuclear Research of RAS, ryazhskaya@vaxmw.tower.ras.ru/Fax: (095)938-53-25, (2) Dipartimento di Fisica Generale, Universita di Torino and Istituto di Cosmogeofisica del CNR

A new generation of giant neutrino telescopes could begin experiments on studies of diffuse cosmic neutrino fluxes and neutrino fluxes from different sky sources at energies  $\geq 10^5$  Gev. At these energies the main background for the experiments (atmospheric neutrinos) becomes to be lower than cosmic neutrino fluxes. Primary nucleons with energies near the knee are responsible for atmospheric neutrinos of considered energies. The problem of primary nucleon flux precision which is needed to understand the results of mentioned upper experiments is discussed.