

**NEW WAY FOR DETERMINATION OF THE PRIMARY COSMIC RAY  
ENERGY SPECTRUM AROUND THE KNEE FROM THE GAMMA ARRAY  
(ARMENIA)**

A.P.Garyaka (1), V.S.Eganov (1), E.A.Mamidjanian (2), [R.M.Martirosov \(1\)](#),  
J.Procureur (3), H.E.Sogoyan (1)

(1) Yerevan Physics Institute, (2) Moscow P.N.Lebedev Institute, (3) Centre  
d'Etudes Nucléaires de Bordeaux-Gradignan, Université Bordeaux  
[martir@ix2.yerphi.am](mailto:martir@ix2.yerphi.am)

Experimental data on EAS characteristics with  $N_e > 10^5$  are used to calculate the value of so-called alpha parameter which is directly connected with the primary energy. It is shown that the showers selected by this parameter value are distributed isotropic and the measurement of the alpha spectrum is a direct way to obtain the primary energy spectrum.

The obtained energy spectrum is compared with other experimental data.