

The “Carpet-3” shower array for search of diffuse gamma radiation with energy $E_\gamma > 100\text{TeV}$

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At present at the Baksan Neutrino Observatory of INR RAS a preparation of experiment for measuring a flux of cosmic diffuse gamma radiation with energy higher than 100TeV (experiment “Carpet-3”) is carried out. The preparation of the experiment will be propose of enlarge the area both of muon detector and ground part of shower array. At the present stage the plastic scintillation counters with total continuous area 410m are installed in the muon detector (MD) underground tunnels and they are totally equipped with electronics. A tuning of counters and electronics are made. The six modules for shower detectors from twenty ones already are placed on surface of absorber MD. It has been created the new liquid scintillation detector for modules of ground part of array, the characteristics which are presented. It is shown that the “Carpet-3” shower array will have the best sensitivity to the flux of primary gamma rays with energies in the range 100TeV-1PeV and will be quite competitive in gamma-ray astronomy in such energies.

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