

Simulation of Characteristics of the Neutron Detector Based on ^3He -Counters

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The design of the neutron detector based on ^3He -counters for use in GAMMA-400 space observatory for e/h showers separation was suggested. Its characteristics are obtained by simulation on GEANT4 with the characteristics of the neutron detector which was installed on PAMELA spectrometer were compared. Time allocation of neutrons absorption was obtained as a function of registration time for different ^3He pressures. A nomogram was plotted for miscounts identification of the detector depending on the number of neutrons crossing the detector and on its time resolution.

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