

Investigation of gamma rays at an altitude of 3340 meters above sea level on a complex installation HADRON-55

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For research, our group uses an installation with an area of 55 m², consisting of two recording levels, gamma and hadron blocks, separated by a two-meter gap, located at the Tien Shan high-altitude scientific station. The main idea is to select interactions that are only observed in the gamma block, and not observed in the hadron block.

The upgraded ionization calorimeter with a field of scintillation detectors will be used for research in the field of high-energy gamma astronomy. The ionization calorimeter consists of two parts - the upper gamma-block and the lower hadron block, separated by a two-meter gap. The gamma block registers, i.e. absorbs the electron-photon component (EPC) of cosmic rays, the hadronic component, due to the small thickness of the gamma block, passes through the gamma block without interactions and begins to interact and generate particles in the hadron block.

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