

LARGE MUON TRACKING DETECTOR IN *KASCADE* EAS EXPERIMENT

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Accurate measurements of the muon component in EAS are particularly important for determination of the primary CR spectrum and composition. Multiparameter analysis possibilities in *KASCADE* have been recently enhanced by putting into operation a large area streamer tube muon tracking detector. With its acceptance of about $500 \text{ m}^2 \cdot \text{sr}$ it identifies in EAS muons with the energy exceeding 0.8 GeV.

The reconstruction of the mean muon production height, a parameter related to the nature of primary UHE particle, is a main goal of this detector. In addition, this detector is capable of independent determination of the shower direction, therefore, can be used in combination with the scintillator array to improve the overall angular resolution of *KASCADE*. For the above-mentioned applications a good and well understood accuracy in determination of the angles of the muon tracks is of a primary importance.

The construction of the whole detector, as well as specially developed for it streamer tubes and electronics, allowed to reach very high efficiency of muon track detection, on the level of 0.72. Various approaches to the determination of the angular resolution in track determination will be discussed. The influence of the design and operation factors on the resolution, which can be obtained on the level of 0.2° , will be shown. Examples of the detector performance will be given.