

The analysis of muon component of extensive air showers from the SUGAR data

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The Sydney University Giant Air-shower Recorder (SUGAR) measured the muon component of extensive air showers from muon-detector readings. Data of SUGAR allows us to reconstruct the empirical dependence of muon density on the distance from the axis of the shower -lateral distribution function (LDF). We compare this function with the predictions of hadronic interaction model QGSJET-II-04 for proton and iron with primary energy $10^{17} - 10^{18.5}$ eV.

Primary authors: RUBTSOV, G.I. (Institute for Nuclear Research of the Russian Academy of Sciences); KARPIKOV, I. S. (Institute for Nuclear Research of the Russian Academy of Sciences); ULRICH, J (School of Physics, University of Sydney); BELLIDO, J. A. (Physics Department, The University of Adelaide); KALMYKOV, N. N. (SINP MSU); CLAY, R. W. (Physics Department, The University of Adelaide); TROITSKY, S. V. (Institute for Nuclear Research of the Russian Academy of Sciences)

Presenter: KARPIKOV, I. S. (Institute for Nuclear Research of the Russian Academy of Sciences)

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