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Dependence of X_{\max} and multiplicity of electron and muon on different high energy interaction models

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Abstract

Different high energy interaction models are applied in CORSIKA code to simulate Extensive Air Showers (EAS) generated by Cosmic Rays (CR). In this work the effects of QGSJET01, QGSJETII, DPMJET, SIBYLL models on X_{\max} and multiplicity of secondary electrons and muons at observation level are studied.

Keywords: cosmic ray, hadronic interaction, CORSIKA, extensive air shower

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