

CALCULATION OF THE ATMOSPHERIC NEUTRINO FLUX IMPROVED WITH RECENT COSMIC RAY OBSERVATIONS

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The primary cosmic ray spectrum below 100 GeV has been measured very accurately by the recent experiment, such as BESS and AMS. We revise the prediction of the atmospheric neutrino flux based on these observations. In this study, we also use the improved measurements of the secondary cosmic ray, such as muons and gamma rays, in the atmosphere to calibrate the hadronic interaction model.