The simulation of the DAMPE detector

(executive summary)

What is this contribution about?

This work is about the Monte Carlo simulation of the DAMPE detector .

Why is it relevant / interesting?

Extensive Monte Carlo simulations are essential in understanding the detector's response for high energy particle detection experiments.

What have we done?

In this work, we present the framework of the simulation tool, the production farms, the data-MC comparison of the DAMPE.

What is the result?

We have spent a lot of computing resource to produce a huge mass of MC data for high-precision measurements of the cosmic rays. The comparison between different simulations is used to determine the largest systematic uncertainties from the hadronic interaction models.