

Executive Summary:

Measurement of muon contents in cosmic ray shower with LHAASO-KM2A around knee region

Hengying Zhang(zhanghy607@mail.sdu.edu.cn), Cunfeng Feng,
Xiaoting Feng, Lingling Ma, Huihai He, Songzhan Chen, Cong Li
(on behalf of the LHAASO collaboration)

- ◆ This contribution is about a measurement of muon content using LHAASO-KM2A.
- ◆ Studying muons becomes therefore a sensitive and direct way to probe the hadronic physics and to identify possible deficiencies of hadronic interaction models. The muon number in an extensive air shower is also sensitive to the cosmic ray mass composition.
- ◆ We have done the comparison of muon content in LHAASO-KM2A simulation and experimental data.
- ◆ The simulation results are fairly consistent with experimental data. It provides important support for subsequent physical analysis.