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## Study the variance of the mean logarithmic mass of cosmic rays in the knee region using LHAASO-KM2A

Sunday, 26 November 2023 14:40 (5 minutes)

Utilizing the unique advantages of the LHAASO experiment, we have achieved a high-precision measurement of the muon content generated by cosmic rays in the knee region of atmospheric showers. The first measurement of  $\sigma_{lnA}$  in the knee region using LHAASO-KM2A, combined with  $\langle \ln(A) \rangle$ , provides experimental evidence for major physical issues such as the origin of the knee region and the origin of cosmic rays.

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