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Reducing uncertainty in atmospheric neutrino flux prediction.

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Abstract content

The atmospheric neutrino is still an important tool in the study of neutrino physics. The uncertainty of the predicted atmospheric neutrino flux is caused by the uncertainties in the physical assumptions and in the calculation scheme. We discuss them quantitatively, and present the works to reduce them. The uncertainty related to the hadronic interaction model was discussed before, therefore, we mainly study other uncertainty sources than the hadronic interaction model here.

If this papers is presented for a collaboration, please specify the collaboration

Summary

Reference

Proceedings of the 30th International Cosmic Ray Conference; Rogelio Caballero, Juan Carlos D'Olivo, Gustavo Medina-Tanco, Lukas Nellen, Federico A. Sánchez, José F. Valdés-Galicia (eds.); Universidad Nacional Autónoma de México, Mexico City, Mexico, 2008; Vol. 5 (HE part 2), pages 1491-1494

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