30th International Cosmic Ray Conference

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Radio Detection of Neutrinos from Behind a Mountain

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Abstract content

We explore the sensitivity of a neutrino detector employing strongly directional high gain antennas to detect the conversion of neutrinos in the 10ˆ16 eV range in a mountain or the earth crust. The directionality of the antennas will allow both, the low threshold and the suppression of background. This technology would have the advantage that it does not require a suitable atmosphere as optical detectors do and could therefore be deployed at any promising place on the planet. In particular one could choose suitable topographies at latitudes that are matched to promising source candidates so that the time the source spends at the horizon and in the sensitive area of the detector is maximized.

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 1585-1588

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