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Subrelativistic Particle Searches with AMANDA

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Abstract content

Supermassive particles like magnetic monopoles, Q-balls and nuclearites may emit light at subrelativistic speeds through different suggested mechanisms. One of them is nucleon decay catalysis by magnetic monopoles, where the decay products would emit Cherenkov radiation along a monopole track. The emitted secondary light from subrelativistic particles could make them visible to the AMANDA-II neutrino telescope, depending on the resulting luminosity. We present first experimental results from searches with AMANDA-II for events of this type.

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

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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. 4 (HE part 1), pages 803-806

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