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## **Deconvolution of prompt and extra-terrestrial neutrino fluxes in AMANDA and IceCube**

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### **Abstract content**

The unknown flux of prompt atmospheric neutrinos presents a challenging background to searches for extra-terrestrial neutrinos in high-energy detectors. Uncertainties in this flux will weaken the power of the detector to place constraints on other expected signals. A new likelihood analysis, using the full information present in event arrival directions and energy will be presented, which allows simultaneous constraints on unknown prompt atmospheric backgrounds and astrophysical neutrinos to be placed.

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

IceCube

### **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 1453-1456

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