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## Medium scale clustering of ultrahigh energy cosmic ray arrival directions

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### Abstract content

The two-point autocorrelation function of ultra-high energy cosmic ray (UHECR) arrival directions has a broad maximum around 25 degrees, combining the data with energies above  $4 \times 10^{19}$  eV (in the HiRes energy scale) of the HiRes stereo, AGASA, Yakutsk and SUGAR experiments. This signal is not or only marginally present analyzing events of a single experiment, but becomes significant when data from several experiments are added. Both the energy dependence of the signal and its angular scale might be interpreted as first signatures of the large-scale structure of UHECR sources and of intervening magnetic fields.

**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. 4 (HE part 1), pages 495-498

**Primary author(s) :** Prof. KACHELRIESS, Michael (Department of Physics, NTNU)

**Co-author(s) :** Dr. SEMIKOZ, Dmitri (APC, Paris & Moscow, INR)

**Presenter(s) :** Prof. KACHELRIESS, Michael (Department of Physics, NTNU)

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