International Symposium on Future Directions in UHECR Physics



Contribution ID: 96 Type: talk

The Need for Hard Spectrum Local Sources of UHECR Nuclei

Wednesday 15 February 2012 15:20 (20 minutes)

Using the recent Auger energy spectrum and composition analysis results, an investigation is carried out into the requirements placed on the UHECR sources. The spatial distribution of these sources is investigated along with the energy distribution of UHECR they output. These investigations reveal the need for local UHECR sources which output a hard spectrum of intermediate/heavy UHECR. These results demand that local (<80 Mpc) UHECR sources exist, placing exciting and difficult requirements on the local extragalactic candidate sources. None negligible (>0.01 nG) extragalactic magnetic fields are noted to further strengthen these results

Author: Dr TAYLOR, Andrew (ISDC, University of Geneva)Presenter: Dr TAYLOR, Andrew (ISDC, University of Geneva)

Session Classification: Source models and theory challanges of UHECRs