

Astrophysics > High Energy Astrophysical Phenomena

A Faraway Quasar in the Direction of the Highest Energy Auger Event

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(Submitted on 6 Jan 2010)

The highest energy cosmic ray event reported by the Auger Observatory has an energy of 148 EeV. It does not correlate with any nearby ($z < 0.024$) object capable of originating such a high energy event. Intrigued by the fact that the highest energy event ever recorded (by the Fly's Eye collaboration) points to a faraway quasar with very high radio luminosity and large Faraday rotation measurement, we have searched for a similar source for the Auger event. We find that the Auger highest energy event points to a quasar with similar characteristics to the one correlated to the Fly's Eye event. We also find the same kind of correlation for one of the highest energy AGASA events. We conclude that so far these types of quasars are the best source candidates for both Auger and Fly's Eye highest energy events. We discuss a few exotic candidates that could reach us from gigaparsec distances.

Comments: 13 pages

Subjects: **High Energy Astrophysical Phenomena (astro-ph.HE)**; High Energy Physics - Experiment (hep-ex); High Energy Physics - Phenomenology (hep-ph)

Report number: FERMILAB-PUB-10-005-A

Cite as: [arXiv:1001.0972v1](https://arxiv.org/abs/1001.0972v1) [astro-ph.HE]

Submission history

From: Ivone F. M. Albuquerque [[view email](#)]

[v1] Wed, 6 Jan 2010 21:03:06 GMT (16kb)

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