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Analysis of Correlations Between Pierre Auger and IceCube IC59 Data GEORGE FILIPPATOS, Penn State University — The sources of ultrahigh-energy cosmic rays detected by the Pierre Auger Observatory are yet unknown. It is natural to expect that cosmic-ray sources could produce high-energy neutrinos detectable by IceCube. In this work we analyze coincidences between publicly available IceCube data from IC59 and Auger events. A likelihood estimator is constructed from spatial and temporal correlations based on Monte Carlo simulations of the real data. This procedure can be used in a real time search, allowing for any coincidences with sufficiently high likelihood to be followed up with near real time multiwavelength observations.

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