

Abstract Submitted
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Search for Galactic neutron sources with the Pierre Auger Observatory: correlations with x-ray binaries and supernova remnants DAVID THOMAS, Colorado State University — In this study the results are reported of searches, using data from the surface detector of the Pierre Auger Observatory, for potential Galactic neutron sources near objects in three catalogs: low mass x-ray binaries, high mass x-ray binaries, and supernova remnants. The search was performed in windows of 1° increments from 1° to 10° around catalog objects in six energy ranges. The maximum excess found was 3.5σ in the energy range $1.5 - 2.5$ EeV in a 3° window around high mass x-ray binaries. The chance probability of finding an excess this large in this search is estimated to be 1%.

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