

## **HINTS FROM EXTREMELY HIGH ENERGY COSMIC-RAY OBSERVATIONS**

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Primary antimatter search and source location and identification of the most energetic particles in cosmic rays are the aims of two of the most fascinating research programs carried out over the last few decades.

The fact that there has been no detection of primary antimatter in the Milky Way up to a few hundred GeV does not disprove the existence of superclusters of antigalaxies in the Universe.

In this paper the AGASA experiment measurements are compared to various theoretical models. Moreover, it is shown under what conditions the AGASA data above  $10^{19}$  eV result compatible with the hypothesis that Extremely High Energy Cosmic Rays (EHECR) are extragalactic with a possible component of antimatter.