

Cluster of antistars as a source of antihelium in a flux of galactic cosmic rays

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Macroscopic cosmic antimatter objects are predicted in baryon asymmetrical Universe in the models of strongly nonhomogeneous baryosynthesis. We test the hypothesis of the existence of an old globular cluster of antistars in the galactic halo by evaluating the flux of helium anti-nuclei in galactic cosmic rays. Due to the symmetry of matter and antimatter we assume that the antimatter cluster evolves in a similar way as a matter cluster. The energy density of antiparticles in galactic cosmic rays from antimatter globular cluster is estimated. We propose a method for the propagation of a flux of antinuclei in a galactic magnetic field from the globular cluster of antistars in the Galaxy.

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