

# Method to Select Gamma Rays with Energy above 50 GeV against a Charge-Particle Background in the GAMMA-400 Space Telescope

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Studying high-energy ( $> 50$  GeV) cosmic gamma radiation raises a problem of selection of neutral gamma-rays from a background of charged particles. The problem is embarrassed by the *backsplash* effect. The backplash consists, in the main, of low-energy (1 MeV) secondary photons moving backwards and is produced by any high-energy gamma quantum. A charged-particle rejection method using the anticoincidence and time-of-flight systems is proposed. Charged-particle events are distinguished from those being triggered by high-energy gamma-rays producing backplash. The method is based on the time separation of signals. It allows us to keep the gamma-ray detection efficiency high up to high energies.

## Presentation type

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