

## **CASCADING PARAMETERS OF EHE PRIMARY PHOTONS IN THE SUN'S MAGNETIC FIELD**

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The study of cascading initiated by extremely high energy (EHE) photons in the Sun's magnetic field is an effective tool for solving the problem of primary compositions and investigating the photon content in the EHE cosmic ray spectrum. The processes of the magnetic pair production and bremsstrahlung are the basic mechanisms by which our Monte Carlo simulation of photon primary in Sun's magnetic field is taken into account. Such process has been simulated in the magnetic field near the Sun's surface for predicting the cascading parameters of these extraordinary showers. Upon our simulation results, such cascading particles produced by primary photon with energy exceeds  $10^{19}$  eV could be detected on the Earth's surface within a solid angle equal  $6.12 \times 10^{-4}$  sr from the Sun's position. The characteristics of cascading of gamma-ray initiated in such strong magnetic field are discussed through the simulation study.