

## The GAMMA-400 Space Experiment: Gammas, Electrons and Nuclei Measurements

*Friday, 22 June 2012 14:35 (25 minutes)*

The present design of the new space gamma-ray telescope GAMMA-400 for the energy range 50 MeV - 3 TeV is presented. The proposed instrument has an angular resolution of 1-2 degrees at  $E(\text{gamma}) \sim 100$  MeV and  $\sim 0.01$  degrees at  $E(\text{gamma}) > 100$  GeV and an energy resolution  $\sim 1\%$  at  $E(\text{gamma}) > 100$  GeV. By the mean of a deep segmented calorimeter high energy electrons flux can be studied, with a proton rejection factor of about  $10^6$ . The GAMMA-400 experiment is optimized to address a broad range of science topics, such as search for signatures of dark matter, studies of Galactic and extragalactic gamma-ray sources, Galactic and extragalactic diffuse emission, gamma-ray bursts, as well as high-precision measurements of spectra of cosmic-ray high energy electrons, and protons and nuclei up to the knee.

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**Session Classification:** Future Projects