Results from the Fermi Gamma-ray Space Telescope after four years in orbit

Prof. Dr. Olaf Reimer

Leopold-Franzens-Universität Innsbruck Institut für Astro- und Teilchenphysik

Despite the well-known results from the discovery phase right after begin of Fermi mission (e.g. the populations of gamma-ray and millisecond pulsars, the spectral extension of GRBs into GeVs), other science investigations took considerably longer to accomplish. Here I'll focus on those results that were not unequivocal anticipated or obtained serendipitously, like the discovery of Nova V407 Cyg, variability in the Crab Nebula, the discovery of local group and starburst galaxies, the lack of detecting galaxy clusters, the existence of Fermi "Bubbles", and the measurements of the cosmic ray electron and even positron spectrum.