A new view of the high energy gamma-ray sky with the Fermi Gamma-Ray Space Telescope

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Following its launch in June 2008, high energy gamma-ray observations by the Fermi Gamma-ray Space Telescope have opened a new and important window on a wide variety of phenomena. These have included the discovery of a new population of pulsars pulsing only in gamma-rays providing new insight into some of the extreme accelerators in our Galaxy; detection of photons up to 10s of GeV from gamma-ray bursts, transforming our understanding of the astrophysics of these extreme explosions; a determination of the diffuse gamma-ray emission with unprecedented accuracy providing new constraints on dark matter models; along with the discovery of around a thousand new gamma-ray sources. Our continuous monitoring of the high-energy gamma-ray sky has uncovered numerous outbursts from active Galaxies and the discovery of as-yet-unidentified transients from the direction of our Galaxy. In this talk I will describe the current status of the Fermi observatory and review the science highlights from Fermi with a particular focus on our new discoveries of the high energy gamma-ray properties of gamma-ray bursts.

TIME: 4:00-4:50 pm, Thursday the 22th of April 2010
PLACE: 101 Corcoran Hall, GWU
725 21st Street, N.W. (Between G and H Streets)
METRO STATION: GWU/FOGGY BOTTOM (BLUE & ORANGE LINES)