

Fermi Gamma-ray Space Telescope Observations of Gamma-ray Pulsars

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The Large Area Telescope on the recently launched Fermi Gamma-ray Space Telescope (formerly GLAST), with its large field of view and effective area, combined with its excellent timing capabilities is poised to revolutionize the field of gamma-ray astrophysics. The significant improvement in sensitivity of Fermi over EGRET is expected to result in the discovery of a large number of new gamma-ray pulsars, which in turn should lead to fundamental advances in our understanding of pulsar physics.

Almost immediately after launch, Fermi clearly detected all six previously known gamma-ray pulsars and is producing high precision results on these.

An extensive radio and X-ray timing campaign of previously known pulsars is being carried out in order to facilitate the discovery of new gamma-ray pulsars, which has already paid off. In addition, a highly efficient time differencing technique is used to carry out blind searches for radio-quiet (Geminga-like) pulsars, which has also resulted in new discoveries.

I will present some recent results from searches for pulsars carried out on Fermi data, both blind searches and those using contemporaneous timing of known radiopulsars.

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