

High energy radiation from pulsars and pulsar wind nebulae

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ABSTRACT: In this talk, I will review some interesting high energy radiation data in X-rays and gamma-rays from rotation power pulsars, in particular the phase-dependent spectrum, and the relation between X-ray luminosity and spin-down power will be introduced. Then I will use a three dimensional pulsar magnetosphere model to explain the observed data and I also argue that the relation between non-pulsed X-ray luminosity and spin-down power is mainly dominated by the X-ray emission from the pulsar wind nebulae.