

Modeling of pulsar magnetospheres

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Abstract. The inner workings of pulsar magnetospheres have fascinated and confused researchers since the discovery of pulsars. I will review the status of magnetospheric models, including vacuum, space-charge-limited and resistive force-free MHD. I will highlight model predictions for the integrated pulsar quantities (such as spin down and torques) and the observational consequences of calculated magnetic field structure. Particularly, high-energy emission from pulsars allows putting new constraints on the geometry of the emission region and the physics of particle acceleration in the magnetosphere.
