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**Pulsar Polar Cap and Slot Gap Models: Confronting Fermi Data**

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Rotation-powered pulsars are excellent laboratories for studying particle acceleration as well as fundamental physics of strong gravity, strong magnetic fields and relativity. I will review acceleration and gamma-ray emission from the pulsar polar cap and slot gap. Predictions of these models can be tested with the data set on pulsars collected by the Large Area Telescope on the Fermi Gamma-Ray Telescope over the last four years, using both detailed light curve fitting and population synthesis.