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Pulsar Wind Nebulae as Galactic PeVatron candidates

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Pulsar Wind Nebulae are highly intriguing astrophysical objects in many respects. They are the brightest and closest class of relativistic sources, and hence the ultimate laboratory for the physics of relativistic plasmas, where we can study in unique detail processes such as acceleration and collimation of relativistic outflows, or the acceleration of particles at relativistic shocks. In recent times, these sources have also attracted the attention of the Cosmic Ray physics community, as potential sources of cosmic ray positrons and PeV gamma-rays.

I will review the current status of our understanding of Pulsar Wind Nebulae, as it emerges from modelling of their dynamics and high energy astrophysical observations. I will discuss in particular, the exciting developments coming from Ultra High Energy (>100 TeV) gamma ray observations.

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