



Contribution ID: 13

Type: **not specified**

Pulsar Wind Nebulae and their winds

B. Olmi

“Pulsar Wind Nebulae (PWNe) are very fascinating and puzzling objects. They are bright at a very broad range of energies, showing various morphologies, a large variety of emission properties and complex features. They are among the most efficient particles accelerators in the Galaxy, with evidence of large escape and diffusion of particles from the nebulae in the surroundings.

Since they were originated by the interaction of the pulsar wind with the supernova ejecta, the eventual anisotropy of that wind reflects on different properties of the nebula, from the formation of the well known X-ray jet-torus morphology to the properties of polarization and turbulence in evolved systems.

Signatures of the anisotropy have been largely addressed thanks to numerical models, able to reproduce the complex physics needed to describe PWNe and to link the wind physical properties to dynamic and emission signatures.

Here I will discuss the most recent findings in the description and comprehension of those fascinating systems.”