

PHAROS Conference 2019: the multi-messenger physics and astrophysics of neutron stars



Contribution ID : 43

Type : **not specified**

How do pulsars spin-down?

The movement of pulsars through the P-Pdot diagram is crucially important to understanding how the different classes of pulsars are related and to our understanding of the coupling between the neutron star interior and the magnetic field.

We have carried out a long-term monitoring program for 250 pulsars over the last decade and developed new techniques for measuring their long-term spin evolution. We will present these results and discuss the consequences of timing noise, braking index and glitches. Differences between young and older pulsars will be discussed along with the overall implications for the evolution of the population as a whole.

Primary author(s) : Dr SIMON, Johnston (CSIRO)

Presenter(s) : Dr SIMON, Johnston (CSIRO)