

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



Contribution ID : 91

Type : **not specified**

Probing neutron star interiors via pulsar inclination angles

A newly born magnetised neutron star can undergo free precession if its spin and magnetic axes are misaligned. The magnetic axis can then either tend to align or become orthogonal to the spin axis, depending upon a delicate interplay of magnetic spin-down torques and internal viscous dissipation. In this talk I will describe our modelling of this process, and how the distribution of pulsar magnetic inclination angles can potentially constrain neutron star interiors.

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