



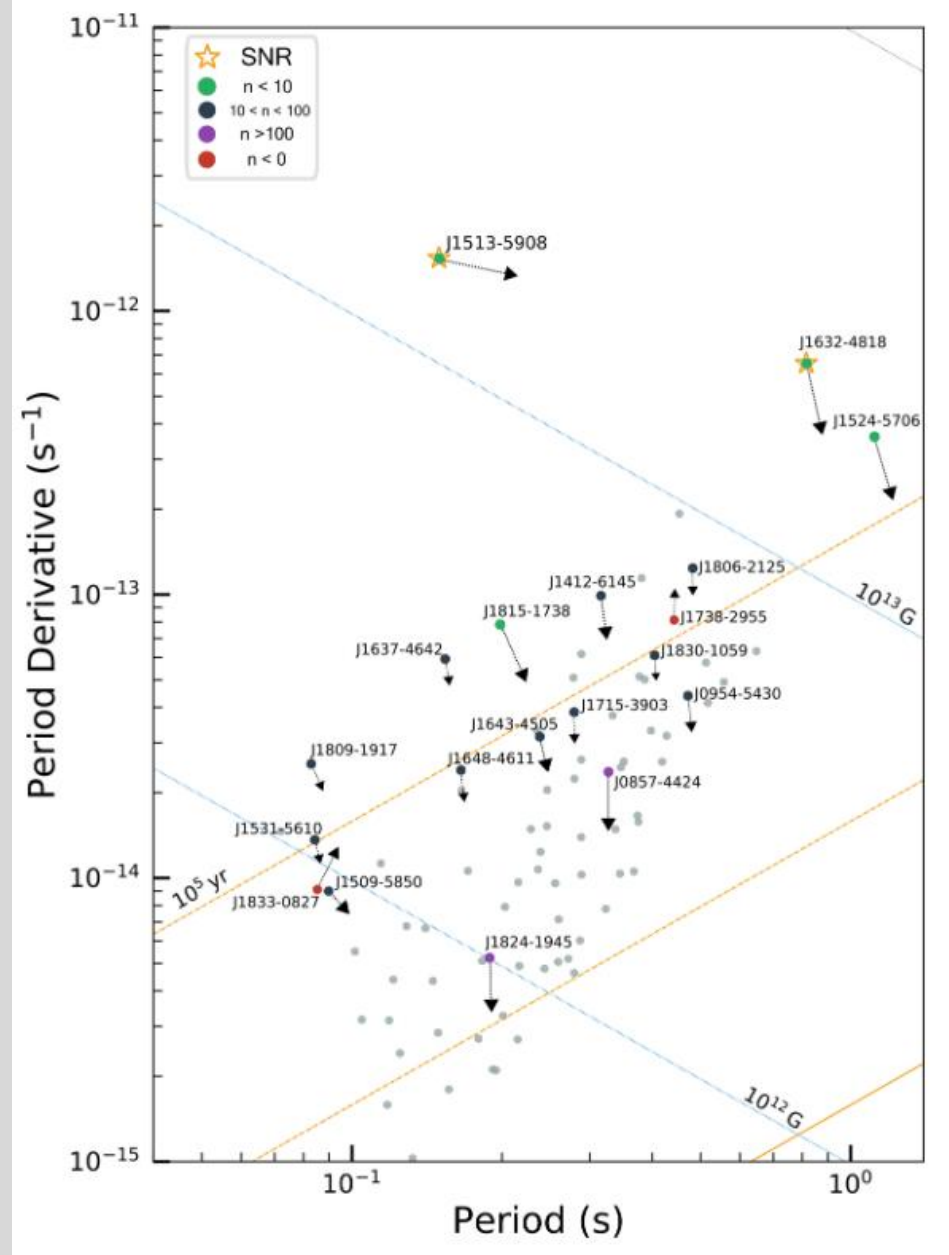
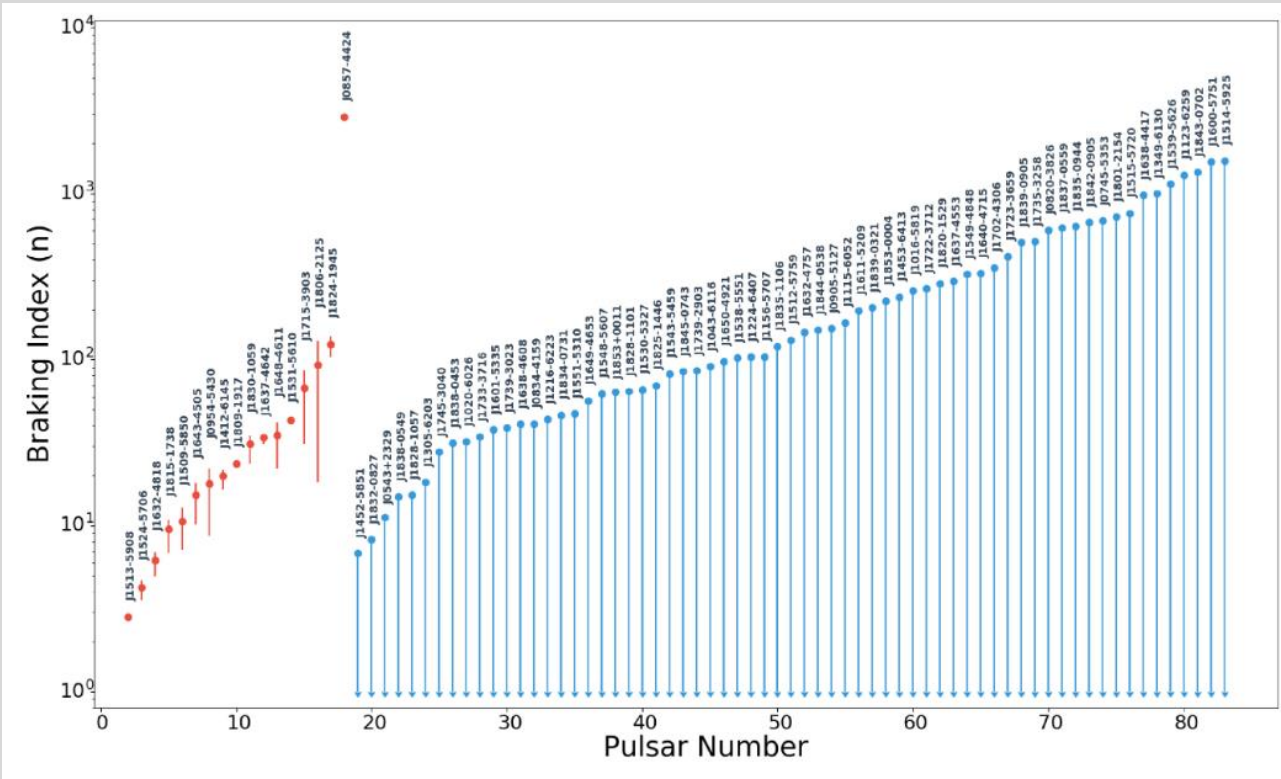
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MAGNETIC FIELD DECAY IN NEUTRON STARS

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Recently, Parthasarathy et al. (2019, 2020) presented detailed timing of 85 pulsars. For many of them braking indices were measured.

We analyze different approaches to explain these results, and conclude that the best explanation is related to an episode of field decay in young, still relatively hot, NSs.



Conclusions

We analyzed different models to explain large braking indices recently measured for a sample of normal radio pulsars.

We conclude that these results can be better explained in the model of magnetic field decay in low-mass NSs due to scatter of electrons off crystal phonons.

These findings are in correspondence with our previous results on magnetic field decay in young normal radio pulsars (Igoshev, Popov, 2014, 2015).

