

On some estimates of magnetic fields in the frame of different models of pulsar braking

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There are several mechanisms of pulsar braking (via magneto-dipole radiation, current losses at the surface and in the magnetosphere, accretion from a debris disk, some processes in the neutron star and others). Usually the magneto-dipole model is used to calculate magnetic fields at the surface of pulsars. These fields are listed in the known catalogues of radio pulsars.

We have proposed to carry out calculations of magnetic inductions using our estimates of the angle β between magnetic moments and rotation axes of neutron stars and different braking models. It is shown that obtained new values of inductions differ from those in the known catalogues several times as a rule.

References

- [1] I. Malov, E. Nikitina, <http://arxiv.org/abs/1608.08525>
- [2] E. B. Nikitina, I. F. Malov, *On magnetic fields of radio pulsars* (Astronomicheskij jurnal, submitted)

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