

**Bespalko, E. V.; Mikheev, S. A.; Puzynin, I. V.; Tsvetkov, V. P.**

**A gravitating rapidly rotating superdense configuration with realistic state equations.** (Russian. English summary) [Zbl 1100.85001](#)

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The well known hydrostatic equilibrium equations of a gravitating rapidly rotating superdense configuration in post-Newtonian approximation have a bifurcation point in their solutions. Here, it is shown that the bifurcation point problem can be reduced to a real solution of a cubic algebraic equation in a domain of physical values of some parameters.

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**MSC:**

[85A15](#) Galactic and stellar structure

[83C55](#) Macroscopic interaction of the gravitational field with matter (hydrodynamics, etc.)

**Keywords:**

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