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Properties of Rotating Neutron Stars in the Relativistic  $\sigma$ - $\omega$  Model

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Abstract: The properties such as the moment of inertia, the surface redshift and the radius of gyration of rotating neutron stars in the relativistic  $\sigma$ - $\omega$  model are studied with the Hartle's method. The relation between the angular velocity of the fluid relative to the local inertial frame and the uniform angular velocity relative to the infinite is calculated.

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