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Critical Collapse of Non-Rotating and Rotating Neutron Star Systems with Axisymmetry KE-JIAN JIN, WAI-MO SUEN, Washington University — GRAstro-2D is the package for simulation of system with axisymmetry. The convergence of this code is ensured. With this code we study the threshold of gravitational collapses of neutron stars. We find type I critical collapses in both non-rotating and rotating neutron star systems. Further, we show that a critical collapse may happen in a cooling process.

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