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Neutron stars as a nuclear physics laboratory

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Compact astronomical objects, historically called neutron stars, are remnants of dying stars that survived supernova explosions. They can be viewed as giant nuclei held together by gravitational forces acting against the pressure of degenerated nuclear matter.

We discuss astronomical constraints on the neutron star properties: mass, radius, temperature, age. Then we review the nuclear physics inputs needed for the description of neutron star properties.

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