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Static Planck stars as a dark matter candidate

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I will explain how corrections motivated by loop quantum gravity can be included in the Tolman-Oppenheimer-Volkoff equation for spherically symmetric static stars. The quantum-corrected equation has new star solutions with a Planck mass, Planck radius, and no horizon. These bound objects could form in the early universe, be an end state for an evaporating black hole, and could potentially contribute to dark matter.

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