

Abstract Submitted
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Statistical Tests on Neutron Star Glitches¹ JOSHUA HOOKER,
Texas A&M Commerce — Glitches in pulsars are occasional, sudden increases in their rotation frequency as the pulsar otherwise steadily spins down. Using a set of neutron star equations of state which span the experimentally constrained range of asymmetric nuclear matter properties, we calculate the crustal moment of inertia, which relates to the size of a glitch in a broad class of glitch models in which the sudden spin-ups are due to angular momentum transfer between some of the superfluid neutrons in the star and the crust. We present a statistical test to compare the observational data to compare with our theoretical results.

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