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NICER Constraints on the Neutron Star Equation of State

COLE MILLER, University of Maryland, College Park

Precise and reliable measurements of neutron star radii are essential to our understanding of cold, catalyzed matter beyond nuclear saturation density. The report by the NICER team that the isolated pulsar PSR J0030+0451 has a radius of $\sim 13 \pm 1$ km and a mass of $\sim 1.44 \pm 0.15$ solar masses provided significant new constraints on the properties of high-density matter, and updates on this result as well as radius measurements of other pulsars will substantially improve our knowledge about this critical regime of nuclear physics. I will present our analysis of NICER data on pulsars as well as their implications for the matter in neutron star cores.