X-RAYS FROM NEUTRON STARS: RECENT CHANDRA RESULTS

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The outstanding capabilities of the Chandra X-ray Observatory have provided excellent observational data on many radio pulsars and radio-quiet neutron stars. We will present an overview of the recent results on the spectral and timing observations of various types of neutron stars observed with Chandra and discuss the inferred properties of thermal radiation from the surfaces of neutron stars and nonthermal radiation from pulsar magnetospheres. In particular, we will present the analysis and interpretation of the absorption features in the spectrum of the central source of the SNR G296.5+10.0, the periodicities in the X-ray emission of the central source of the SNR RCW 103, and the phase-resolved spectroscopy of the radio pulsars B0656+14 and B1055–52.