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Measuring the neutron-star equation of state from multimessenger observations

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The first direct detection of a gravitational wave from a binary neutron star merger, GW170817, was also the first event to be observed both by gravitational-wave detectors and telescopes. These "multimessenger" observations provided a unique opportunity to constrain the equation of state of cold, dense nuclear matter, which exists in the cores of neutron stars. Recent observations of PSR J0030+0451 from NICER, and the detection of a second binary neutron star merger by LIGO/Virgo, GW190425, have provided additional independent constraints on the equation of state. I will review current measurements from these observations, highlight some of the challenges in extracting equation of state information from gravitational-wave data, and discuss prospects for future observations.