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## Current status of NICER's measurements of the neutron star masses and radii (online)

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The Neutron Star Interior Composition Explorer (NICER) has been in operation from the International Space Station for over 6 years now. By accurately modelling the phase-energy resolved light curves of millisecond pulsars (caused by their hot polar caps) and the effects of general relativity on these light curves, we can obtain measurements of the pulsars' masses and radii. NICER has accumulated over 16 Megaseconds of observational data for these millisecond pulsars, providing data sets of unprecedented quality. I will summarise the results for the two published pulsars and present the current status of the analyses. These published results have naturally sparked a lot of interest and have placed some constraints on the equation of state of dense matter. But they have also raised a lot of questions on our understanding of the surface emission of pulsars and their magnetospheres, and how we can interpret those to extract information on the masses and radii of pulsars. I will then conclude on future prospects from NICER and from future X-ray missions.

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