

PHAROS Conference 2020: The multi-messenger physics and astrophysics of neutron stars



Contribution ID: 158

Type: **Oral Presentation**

Measuring mass of neutron star in LMXBs using QPO observations

Wednesday 1 April 2020 16:45 (15 minutes)

Detection of twin peak quasi-periodic oscillations in power-density spectra of low-mass X-ray binaries can be used to constrain mass of the compact object. In this presentations we will apply the so-called cusp torus model to neutron star in 4U 1646-53 to determine the mass of the neutron star. We will also discuss the possibility to constrain the radius of the neutron star as well.

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Session Classification: Parallel 3A

Track Classification: Neutron stars in binary systems and accretion