

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



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## Dramatic spectral changes at very low luminosity state of X-ray pulsars

*Wednesday 1 April 2020 15:15 (15 minutes)*

I will talk about dramatic spectral changes at very low luminosity state in accreting strongly magnetised neutron stars. These spectral changes were recently discovered in two X-ray pulsars - A 0535+262 and GX 304-1, - thanks to deep NuSTAR observations of these objects. This discovery can shed light on the process of spectra formation in accreting neutron stars under conditions of an extremely strong magnetic field. I will discuss the recent results of radiative transfer calculations accounting for X-ray polarization and test the theoretical results against the observational data.

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