



Contribution ID: 116

Type: **Flash-talk**

X-ray polarization in the Z-sources GX 340+0 and GX 349+2

Polarized X-ray emission from weakly magnetized neutron stars provides key insights into the geometry of the innermost regions of the accretion flow. The results of the spectro-polarimetric analysis of GX 340+0 in both HB and NB, as well as of GX 349+2 in the NB, will be presented. Notably, the soft spectral component exhibits variation between the hard and soft states, while the Comptonized spectral component shows similar polarization in both the HB and NB states. These results can help to study the geometry in the region between the inner disk and the NS surface, providing insights into the nature of the accretion flow and the interplay between different spectral components. So far, the new results obtained by the Imaging X-ray Polarimetry Explorer (IXPE) have revealed a more complicated scenario than expected. Moreover, all Z-sources show polarization varying with spectral state, indicating a notable decrease in polarization when transitioning from the horizontal (HB) to the normal branch (NB).

Contribution

Oral talk

Affiliation

INAF-IAPS

E-mail

fabio.lamonaca@inaf.it

Author: LA MONACA, Fabio (Istituto Nazionale di Astrofisica (INAF))

Presenter: LA MONACA, Fabio (Istituto Nazionale di Astrofisica (INAF))

Session Classification: Flash-talk

Track Classification: Flash-talk