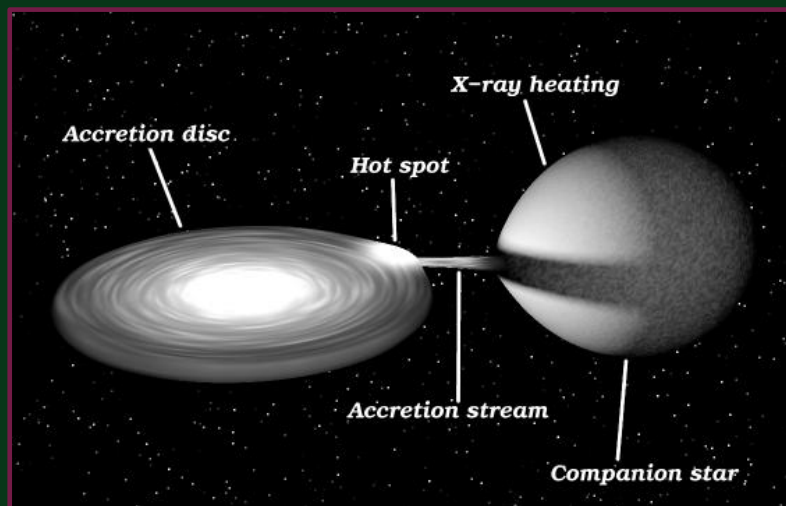


Detection of a Type-C QPO in the soft-to-hard transition in Swift J1727.8-1613

Maïmouna Brigitte , Noel Castro Segura, Federico García , Jiří Svoboda, Maria Diaz Trigo, Mariano Méndez, Federico Vincentelli, Douglas J. K. Buisson, and Diego Altamirano

The source:
the LMXB Swift J1727.8-1613



LMXB

$d = 5.5 \text{ kpc}$

$i < 74^\circ$

$P_{\text{orb}} = 10.8 \text{ h}$

Early K-type
star

Credits : Hynes, <http://www.astro.soton.ac.uk/~rih/>.

Detection of a Type-C QPO in the soft-to-hard transition in Swift J1727.8-1613

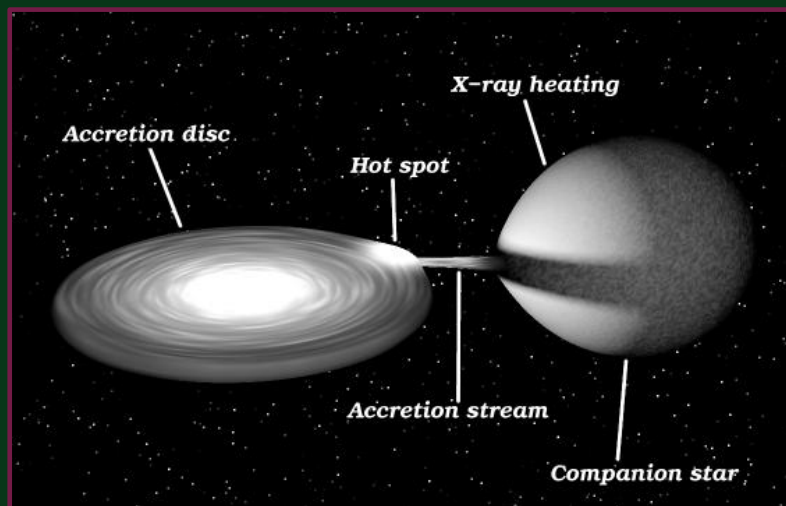
Maïmouna Brigitte , Noel Castro Segura, Federico García , Jiří Svoboda, Maria Diaz Trigo, Mariano Méndez, Federico Vincentelli, Douglas J. K. Buisson, and Diego Altamirano



XMM-Newton

The spectral state:
soft-to-hard transition

The source:
the LMXB Swift J1727.8-1613



LMXB

$d = 5.5$ kpc

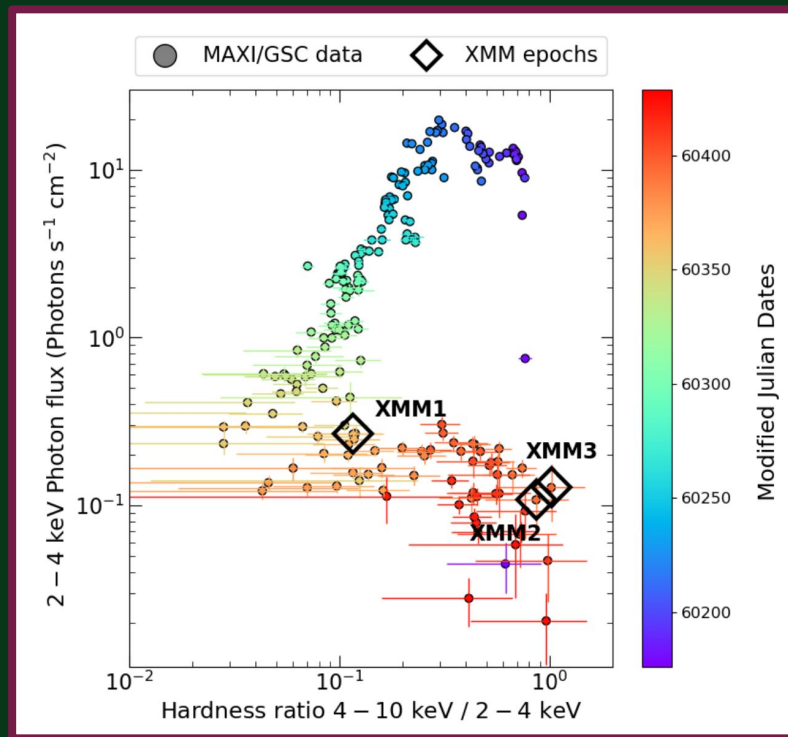
$i < 74^\circ$

$P_{\text{orb}} = 10.8$ h

Early K-type
star

Credits : Hynes, <http://www.astro.soton.ac.uk/~rih/>.

Brigitte et al. submitted

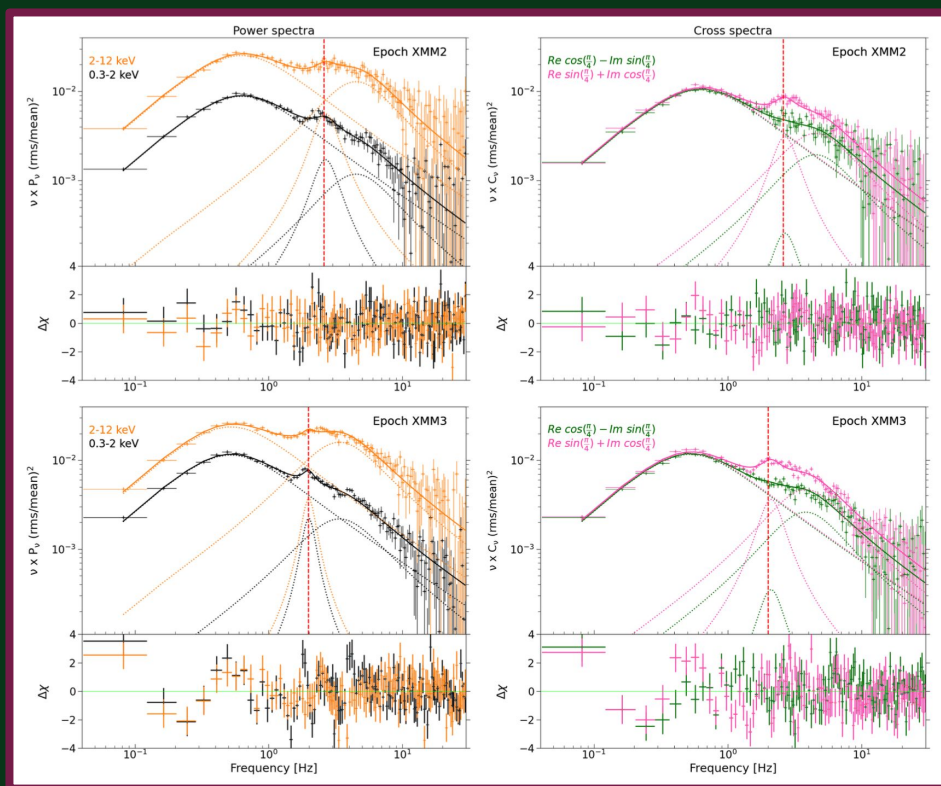


Detection of a Type-C QPO in the soft-to-hard transition in Swift J1727.8-1613

Maïmouna Brigitte , Noel Castro Segura, Federico García , Jiří Svoboda, Maria Diaz Trigo, Mariano Méndez, Federico Vincentelli, Douglas J. K. Buisson, and Diego Altamirano

The results:

The power and cross spectra



- Type-C QPO detected in the PS and CS
- The ν QPO shifts to lower values as the source becomes harder.

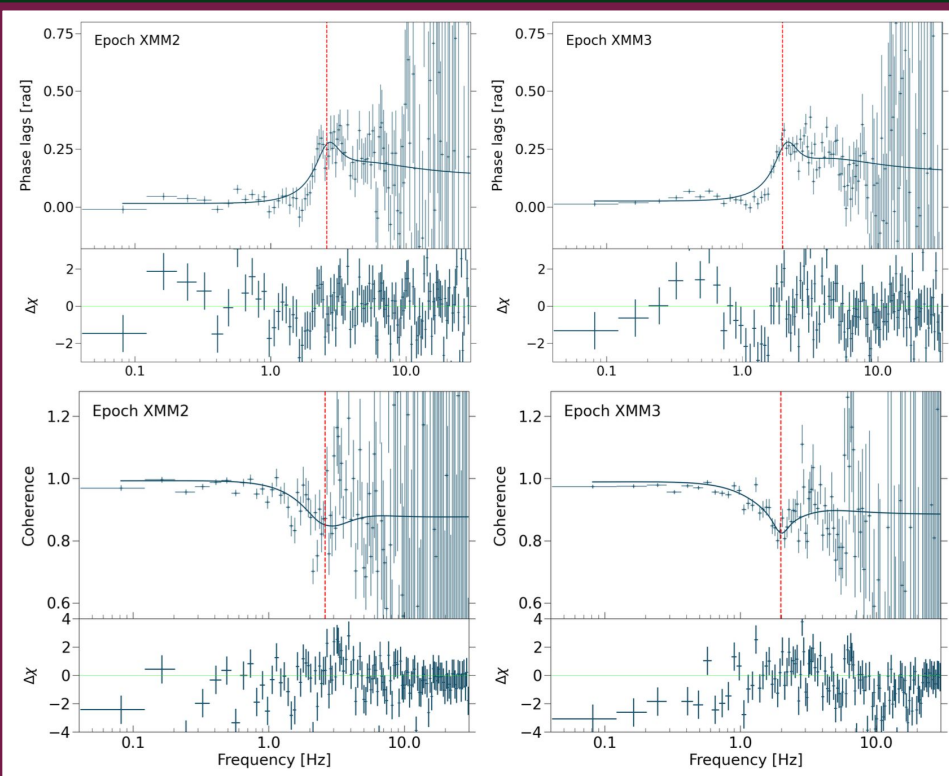
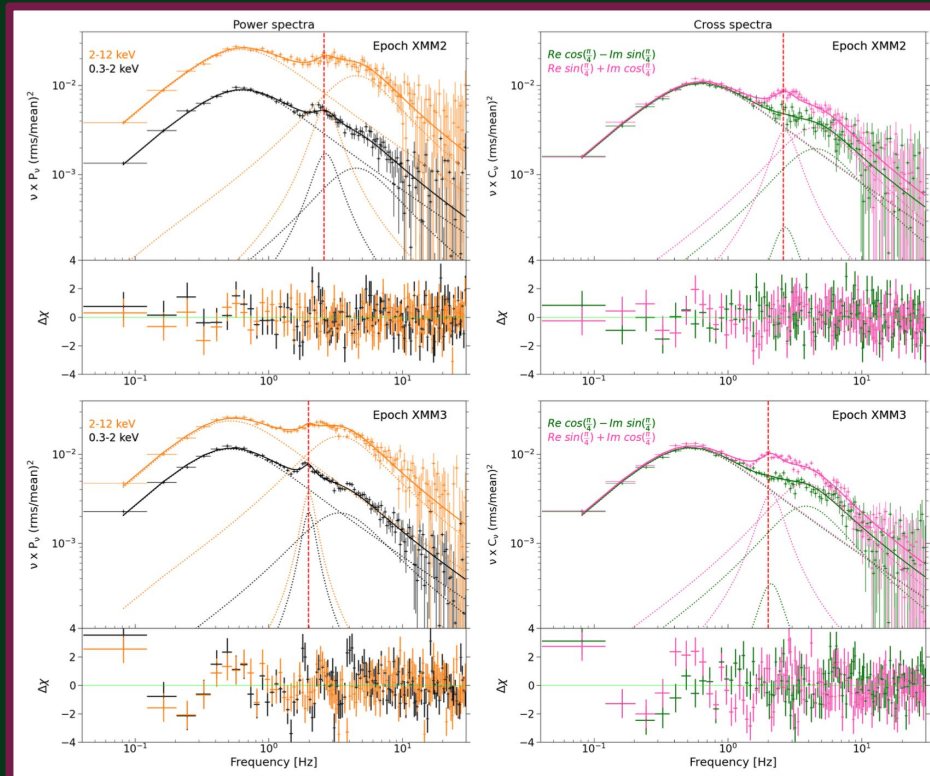
Detection of a Type-C QPO in the soft-to-hard transition in Swift J1727.8-1613

Maïmouna Brigitte , Noel Castro Segura, Federico García , Jiří Svoboda, Maria Diaz Trigo, Mariano Méndez, Federico Vincentelli, Douglas J. K. Buisson, and Diego Altamirano

The results:

The power and cross spectra

The phase lags and coherence



- Type-C QPO detected in the PS and CS
- The ν QPO shifts to lower values as the source becomes harder.

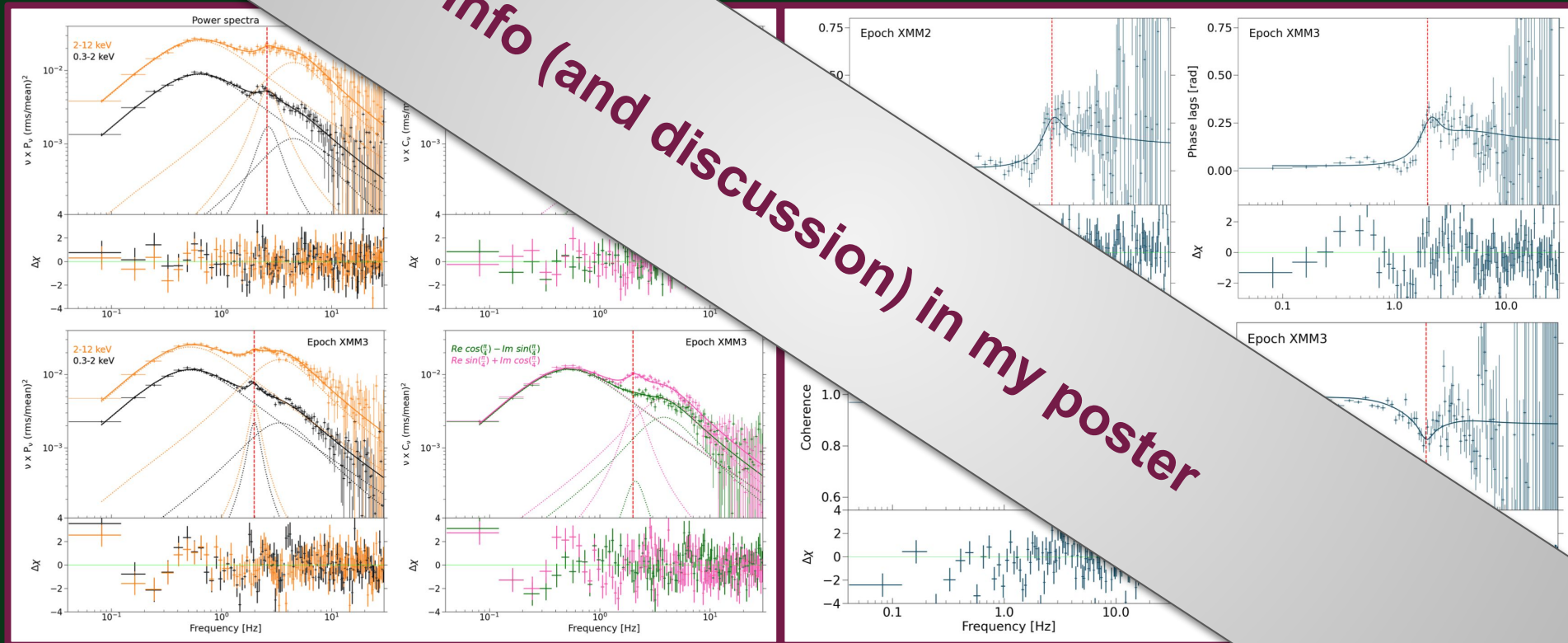
- Phase lags increase and coherence drops at ν QPO

Detection of a Type-C QPO in the soft-to-hard transition in Swift J1727.8-1613

Brigitta Brüggen, Noel Castro Segura, Federico García, Jiří Svoboda, Maria Diaz Trigo, Mariano Méndez, Federico Vincentelli, Douglas J. K. Buisson, and Diego Altamirano

The phase lags and coherence

More info (and discussion) in my poster



- Type-C QPO detected in the PS and CS
- The ν QPO shifts to lower values as the source becomes harder.

- Phase lags increase and coherence decreases as the ν QPO