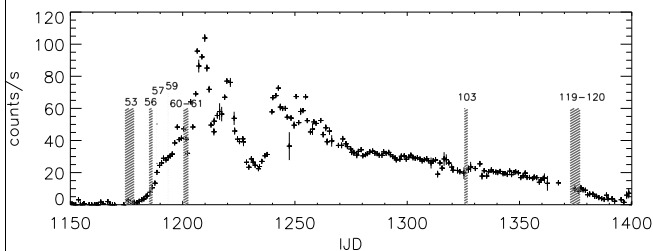




Serendipitous *INTEGRAL* observations of IGR J17464-3213 (H1743-322) over the duration of an extended outburst have determined its true position and allowed to study the physical properties of the outburst evolution of this transient BHC.

IGR J17464-3213 was detected as a new source in March 2003 during a Galactic Center Deep Exposure of *INTEGRAL*. Soon after, Markwardt & Swank (2003) identified it with the transient H1743-322 for which the wrong of two possible positions was recorded in the HEAO-1 catalog.



Long term lightcurve of IGR J17464-3213 with indicated revolution numbers.

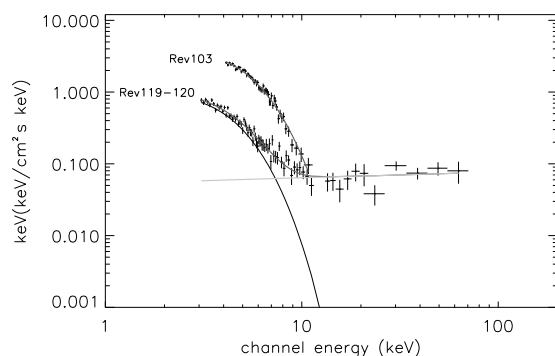
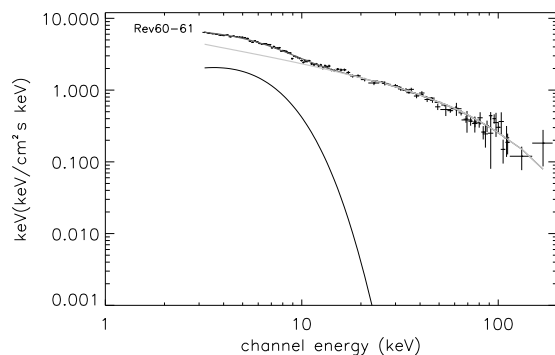
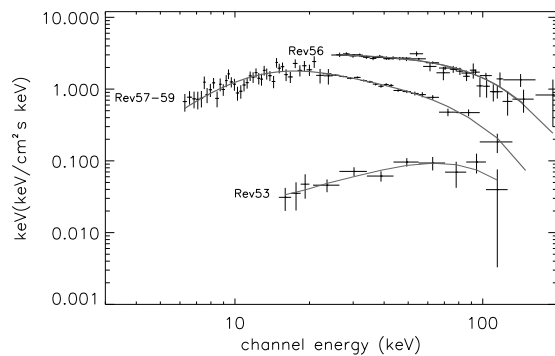
When IGR J17464-3213 was first observed by *INTEGRAL*, it was in a low/hard state and only visible at higher energies with *ISGR1* and *SPI*; the spectrum well described by a comptonization model ($kT_e \sim 20\text{keV}$, $\tau_p \sim 3$) and no discernable disk emission.

About 10 days later the luminosity had increased by a factor of 30; with no change to kT_e but reduced optical thickness ($\tau_p \sim 1.5$). Again ~ 10 days later, the brightening source was in a soft/intermediate state, visible in all instruments with a strong disk blackbody component $T_{in} \sim 1.5\text{keV}$ in addition to the hotter comptonized spectrum ($kT_e \sim 40\text{keV}$, $\tau_p \sim 0.4$).

A few months after the main outburst, when the region was observed again, the source was in a soft state, mainly visible in *JEM-X* as disk blackbody of $T_{in} \sim 1\text{keV}$. A very weak compton tail is visible again in the latest observations.

The outburst evolution is typical for a Black Hole Candidate, underlining the identification of IGR J17464-3213. It was followed serendip-

itously by a large collaboration in survey data without targeted observations (Capitanio et al. 2004).



Spectra in different phases of the outburst

References

- Markwardt C. B., Swank J. H., 2003, ATel, 133
- Capitanio F., et al., 2004, ApJ, *submitted*