Spectral evolution of Scorpius X-1 along its Color-Color Diagram

A. D'aì (1), T. Di Salvo (1), N.R. Robba (1), R. Iaria (1), G. Lavagetto (1) and P.T. Zycki (2)

(1) DSFA - Palermo University, (2) Nicolaus Copernicus Astronomical Center, (robba@fisica.unipa.it / +390916234251)

We have used a large collection of RXTE archive data of the bright X-ray source Scorpius X-1 in order to study the broadband spectral evolution of the source for different values of the accretion rate by selecting energy spectra from its color-color diagrams. We are going to present the results of our analysis and discuss the physical implications derived from the obtained results, with particular emphasis on the hardest part of the X-ray emission and its possible origins.