Iron line and soft excess properties of GX301-2 at different orbital phases

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The high mass X-ray binary pulsar GX301-2 was the target of a campaign of observations with the Italian-Dutch satellite BeppoSAX. The source was observed at six different orbital phases in order to monitor its spectral and timing behaviour along the 41 days orbit. The pulse averaged spectrum is very complex and rich in features. Here we mainly discuss the low energy part (0.4 - 10 keV) of the spectrum and, in particular, the large variability observed in the iron line and in the soft energy excess, along the orbital period. The detection of pulsations at low energy (below 3 keV) seems to be in contrast with the scattering model used until now to explain the soft excess. We also made a comparison with the results of an ASCA observation of this source.