## Magnetized Vela X-1

V. Doroshenko<sup>1</sup>, A. Santangelo<sup>1</sup> and V. Suleimanov<sup>1</sup>

 $^1$ Institut fur Astronomie und Astrophysik<br/>  $E\text{-}mail(DV):\ doroshv@astro.uni-tuebingen.de$ 

Abstract

We present the results of recent observations of a well known HMXB Vela X-1 with Suzaku and review other observed characteristics of a system with aim to estimate the magnetic field of the neutron star. We conclude, that the observed long pulse period of 283.5 s and its evolution, the "off-states", the observed quasi-periodic oscillations and the noise power spectrum of the X-ray emission may be consistently explained if the neutron star has a magnetic field greater than  $10^{13}$  G.