## Ginga Observations of the Massive X-ray Binary Pulsar Vela X-1\*

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Vela X-1 (4U 0900-403) is an eclipsing X-ray binary pulsar with a massive companion star HD 77581. It shows a pulse period of 283 s and an orbital period of 8.964 days. The X-ray binary system has the following stellar parameters: the companion star has mass  $M_{opt} = 23 M_{\odot}$  and radius  $R_{opt} = 31$  $R_{\odot}$ , and the stellar separation is a = 52.9  $R_{\odot}$ . Among the X-ray observations of Vela X-1 with the Ginga astronomical satellite, we have analyzed the data observed on 1991 August 18 and 19. The orbital phase of the present observations was calculated to be  $\Phi_{\rm orb} = 0.29$ -0.47. We report here some tentative results obtained from a timing and spectroscopic studies.

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