

## CO-to-H<sub>2</sub> Abundance Ratio of the foreground gas of the Carina Nebula

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We analyze CO and H<sub>2</sub> absorption lines of the foreground molecular cloud in the Carina Nebula. We use IUE-NEWSIPS & HST-STIS data to analyze the A-X v=0-2 absorption band of CO for 11 hot stars toward the Carina Nebula, while 9 stars of them have FUSE spectra to analyze the v=0-4 vibrational band in the Lyman series of H<sub>2</sub>. The column densities of CO and H<sub>2</sub> varies in the vicinity of  $N(\text{CO}) \sim 10\text{-}13 \text{ cm}^{-2}$  and  $N(\text{H}_2) \sim 10\text{-}19 \text{ cm}^{-2}$ , respectively, and the resultant CO-to-H<sub>2</sub> abundance ratio is about 10-6. We investigate the variation of the abundance ratio according to the relative position of the target stars to morphology the molecular cloud in the Carina Nebula.