HST/FOS SPECTRA OF PG 1351+64: AN INTRINSIC ABSORBER at LOW REDSHIFT

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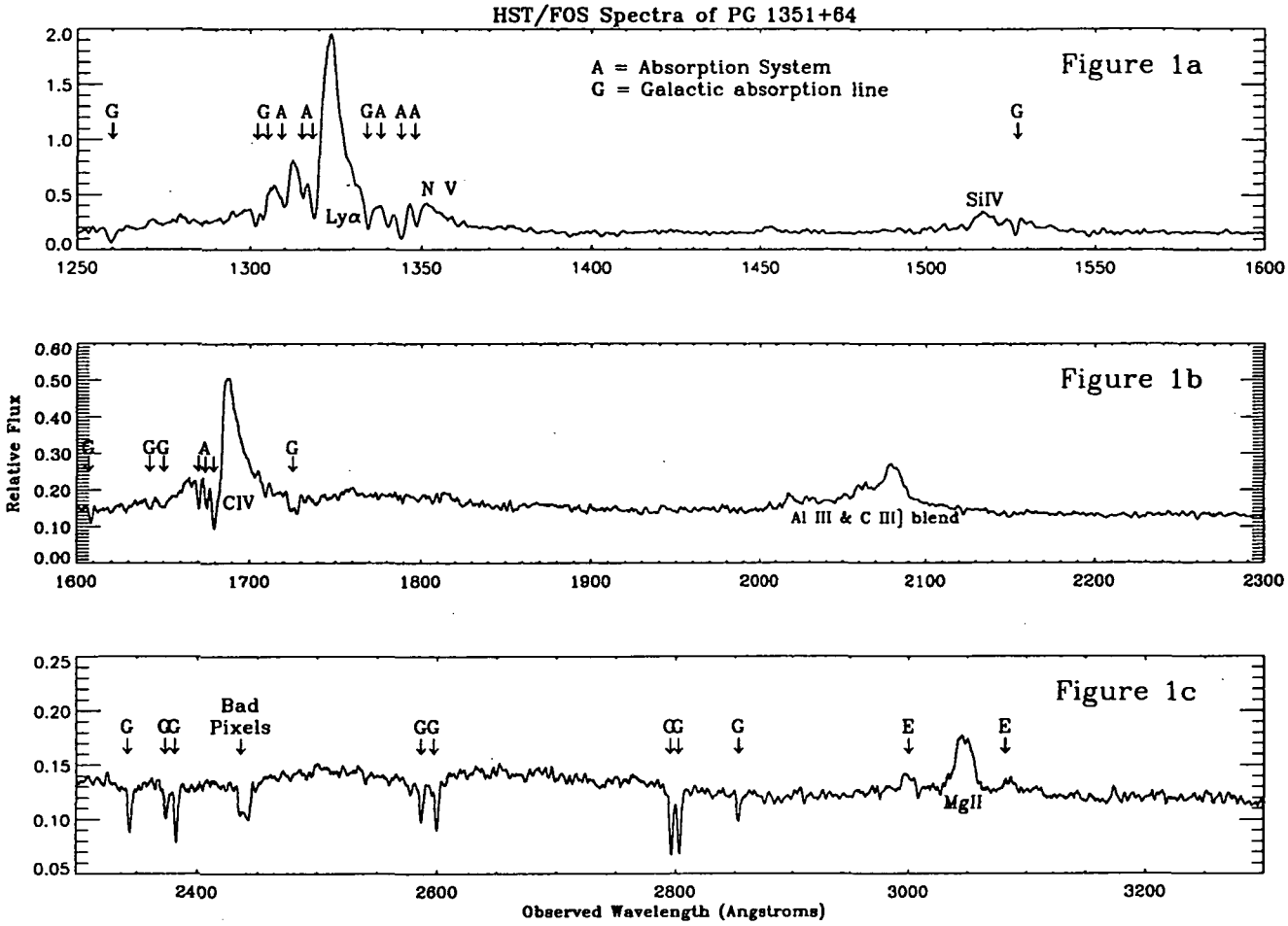
We present (Figures 1a-c) 1 Å resolution spectra of the nearby ($z = 0.08797$) Seyfert galaxy PG 1351+64 taken with the *Faint Object Spectrograph* onboard the *Hubble Space Telescope*. Spectral coverage runs from 1200-3200 Å in the observed frame and includes emission and absorption features due to Lyα, N V, Si IV, C IV, and Mg II. We have detected three distinct intrinsic absorption systems in Lyα, N V, Si IV, and C IV, and tentatively in Mg II, at velocities of 900 km s^{-1}, 1630 km s^{-1}, and 2900 km s^{-1} ($\pm$100 km s^{-1}) relative to the emission-line redshift of the QSO (absorption systems are marked on Figures 1a-c with an "A").

The maximum relative velocity of these absorbers is < 5000 km s^{-1} and therefore does not meet Weymann, Carswell, & Smith's (1981: see also Weymann *et al.* 1991) criteria for **B**road-**A**bsorption-**L**ine (BAL) QSOs at high-z. However, the absorptions are almost certainly intrinsic to the QSO given the low redshift of this object. In addition, PG 1351+64 is marginally radio-quiet, as are all BALQSOs, based on recent estimates of the radio-loud/radio-quiet dividing line (Kellerman *et al.* 1989; Stocke *et al.* 1992).

The narrow velocity width, ≤ 500 km s^{-1}, and low outflow velocities of the absorption systems are more similar to so called "associated absorbers" (Foltz *et al.* 1987) seen at high-z in radio-loud quasars, but whose absorptions are thought to arise in clouds much farther from the nucleus (≥ 1 kpc) than are BAL clouds (1-10 pc). Despite the qualitative resemblance to the associated absorbers, the absorption systems in PG 1351+64 appear to be the low-luminosity analogs of BALQSO absorption troughs. The lower observed outflow velocities in PG 1351+64 are due to the much lower luminosity of the nuclear source in comparison to the high-z, high-luminosity BALQSOs.

In addition, we have discovered "satellite" emission lines displaced 4000-5000 km s^{-1} blueward and redward of the Mg II emission (features marked with an "E" in Figure 1c). These satellite lines are much stronger than similar features observed near C IV in NGC 4151 (Clavel *et al.* 1987) and may also be present in our **HST/FOS** spectrum of Ton 951, a non-BAL Seyfert. These emission features may represent a direct detection of the heating and acceleration of broad line or narrow line clouds by the BAL outflow. Since observational selection effects may have precluded the detection of such features prior to **HST/FOS** spectra, these satellite emission features may be common in Seyfert galaxies.



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