STUDYING THE COMPLEX BAL PROFILES OF Si IV IN $30~\mathrm{BALQSOs}$ SPECTRA

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Most of Broad Absorption Lines (BALs) in quasars (QSOs) present very complex profiles. This means that we cannot fit them with a known physical distribution. An idea to explain these profiles is that the dynamical systems of Broad Line Regions (BLRs) are not homogeneous but consist of a number of density clouds with different physical parameters. Each one of these density regions gives an independent classical absorption line. If the regions that give rise to such lines rotate with large velocities and move radially with small velocities, the produced lines have large widths and small shifts. As a result they are blended among themselves as well as with the main spectral line and thus they are not discrete. Based on this idea we study the BALs of UV Si IV resonance lines in the spectra of a group of High Ionization Broad Absorption Line Quasars (HiBALQSOs) using the Gauss-Rotation model (GR model).