

A STUDY OF THE C IV BALs IN HiBALQSOs SPECTRA

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When Broad Absorption Lines (BALs) appear in the spectra of quasars, they have very complex profiles, which cannot be fitted with a known physical distribution. In order to explain these profiles, we suppose that the Broad Absorption Line Regions (BALRs) are not homogeneous but they consist of a number of density regions or ion populations with different physical parameters. Here, we study the UV C IV BALs in the spectra of a group of High ionization Broad Absorption Line Quasars (Hi BALQSOs). Using the Gauss-Rotation model (GR model), we calculate some kinematical parameters of the BALRs, where these lines are created. We point out that the result of all the absorption lines that are created in these density regions is the observed complex profile.