

have to do with the fact that this is the only BALQSO known to be a gravitational lens (nicknamed the “cloverleaf”). See Angonin *et al.* (1990) and references therein.

This may be an indication of different light paths through the BALR, or possibly time delays in the light paths. BAL time variability studies of this object may be able to identify accurate delay times in the component light paths. If the BALR covers the continuum source similarly for all four light paths, then absorption line studies can identify changes intrinsic to the QSO environment free of any errors due to *microlensing*.

13.6 : 1423+5000 (CSO 646)

This object showed an increase in BAL strength in CIV and possibly Si IV. There was also a decrease in continuum level— this is consistent with $U > U_p(\text{C}^{+3})$.

Between these times a very large decrease in BAL strength occurred (K. Korista, private communication), during a period of relatively stable continuum levels (see figure 13–1). The source of this unusual event is unclear.

13.7 : PG 1700+5153

This is a well studied, low redshift, low-ionization, “Mg II” BALQSO. The Mg II BAL decreased in strength during a period when the continuum appeared to decrease. It is essentially impossible to have a decreasing Mg II BAL with a decreasing ionizing source (in our model) due to the very low value of $U_p(\text{Mg}^{+1})$. A more likely scenario, is that the continuum we observe at a rest wavelength of $6600/(1+0.29)\text{\AA}$, does not closely follow the ionizing flux at $\sim 100\text{--}800\text{\AA}$. Assuming that the BELR respond quickly to ionizing flux changes in this low-redshift object (~ 10 less intrinsically luminous than most of the other BALQSOs), changes in BEL strength may indicate ionizing flux changes.

In figure 13–1, the Mg II BEL increases in line intensity coincident with the decreases in Mg II BAL strength. We suggest that this indicates that the ionizing flux has increased, causing both the BEL intensity change, and the decrease in column density of Mg^{+2} in the BALR.