

amount of N V, we would expect the N V BEL to be noticeably wider, since we would not expect the scattering region to be preferentially only perpendicular to our line-of-sight.

The diminishment of C IV in BALQSOs is more difficult to explain, although C IV might be depressed by BAL gas with near zero outflow velocity. In general, we must conclude that there is still no adequate model for the differences in BEL equivalent widths between BALQSOs and non-BALQSOs and within the BALQSO composite.

Also noticeable in the BALQSO composite is an apparent narrow component to the Ly- α emission. This may imply that there is a region of the BELR that produces narrower the emission lines which lies further from the central source than the BALR. This scenario has been suggested by other workers (*e.g.* P. Francis, private communication). In general, it is believed that the BALR obscures the BELR, but if a narrower broad emission-line region were far enough from the central source such as not to be obscured by the BALR, it would show up as emission on top of the absorption trough. The need for such a region is demonstrated best in PHL 5200 (0225–0534) and H 1413+117 (see figure 12–2). In PHL 5200, the C IV BAL “cuts off” the C IV BEL (implying obscuration of the BELR), and yet a strong narrow Ly- α BEL sits on top of the N V BAL. If this narrow Ly- α emission line were behind the BALR, to estimate the true line strength, we would have to divide the peak flux by the estimated residual intensity of the N V BAL (*i.e.* multiply by about a factor of ten), which would predict an excessively large Ly- α emission line.

Finally, notice the character of the C IV composite BAL. Although, this doesn’t represent an “average” BAL it does show some of the characteristics of the absorption lines. In particular, notice the smooth decrease in absorption on the blue side of the trough. This is in contrast to the more ragged red side. The slopes of the trough sides are biased by the C IV BEL, however the features on the red side of the trough (just blueward of the C IV BEL) may be caused by the presence of narrow absorption lines preferentially close to the emission line redshift. This pattern of a smoother blue side of the BAL trough, and narrow lines redward of the BAL trough, is seen in many BALQSOs (*e.g.* 0019+0107, 0903+1734, 0957–0535, and 1309–0536).