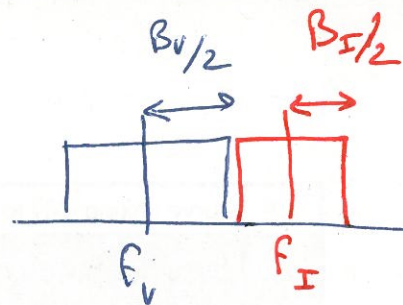


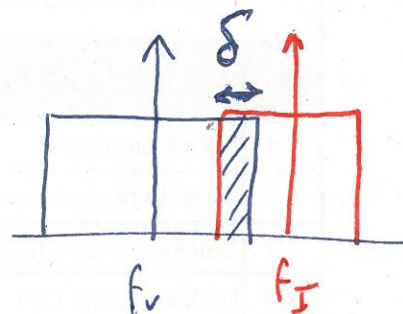
If  $\Delta f > \frac{B_v}{2} + \frac{B_I}{2}$  no overlapping

If  $\Delta f < \frac{B_v}{2} + \frac{B_I}{2}$  overlapping



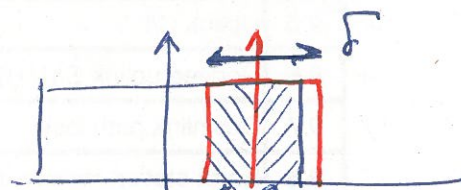
(A) If  $B_v > B_I$

• If  $\Delta f > \frac{B_v}{2}$   $\delta = \frac{B_v + B_I}{2} - \Delta f$

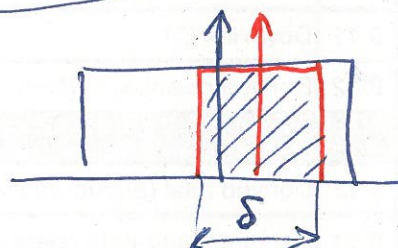


• If  $\frac{B_v - B_I}{2} < \Delta f < \frac{B_v}{2}$

$$\delta = \frac{B_I}{2} + \left( \frac{B_v}{2} - \Delta f \right)$$



• If  $\Delta f < \frac{B_v - B_I}{2}$   $\delta = B_I$



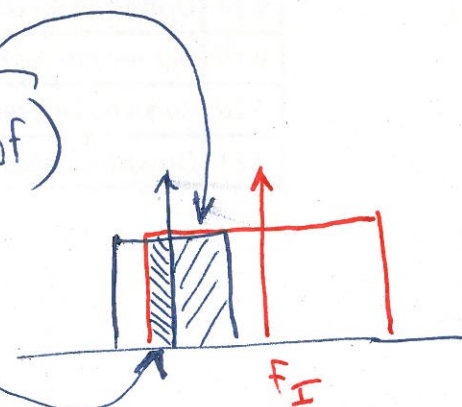
(B) If  $B_v < B_I$

Same reasoning but invert  $B_v$  and  $B_I$ !

•  $\Delta f > \frac{B_I}{2}$   $\delta = \frac{B_v + B_I}{2} - \Delta f$

•  $\frac{B_I - B_v}{2} < \Delta f < \frac{B_I}{2}$   $\delta = \left( \frac{B_v}{2} \right) + \left( \frac{B_I}{2} - \Delta f \right)$

•  $\Delta f < \frac{B_I - B_v}{2}$   $\delta = B_v$



Then to calculate  $\alpha$  or  $\beta$  it depends on which  $B_v$  you make the ratio ...