Collection of David's notes and ideas

04/10/13

Calculating σ_r^2

$$\frac{E_b}{N_0} = \frac{(L^2-1)\varepsilon_T}{6log_2(L)N_0}$$

$$\sigma_r^2 = N_0\varepsilon_R = \frac{(L^2-1)\varepsilon_T\varepsilon_R}{6log_2(L)\left(\frac{E_b}{N_0}\right)}$$

$$\text{Raised Cosine Filter} \implies \varepsilon_T = \varepsilon_R = 1$$

$$\sigma_r^2 = \frac{L^2-1}{6log_2(L)\left(\frac{E_b}{N_0}\right)}$$