

Physics 104 Exam 2 Equations

$$V = CR$$

$$\frac{1}{R} = \frac{1}{R_1} + \frac{1}{R_2}$$

$$R = R_1 + R_2$$

$$R = \frac{R_1 R_2}{R_1 + R_2}$$

$$f_c = \frac{1}{2\pi RC}$$

$$f_c = \frac{R}{2\pi L}$$

$$Power = CV = C^2 R = \frac{V^2}{R}$$

$$G = \frac{R_f}{R_{input}}$$

$$Difference\ in\ level = (10dB)\log\frac{W_2}{W_1}$$

$$\frac{v_1}{N_1} = \frac{v_2}{N_2}$$

$$Power = V_1 C_1 = V_2 C_2$$

$$S/N = (10\text{ dB})\log\left(\frac{P_{signal}}{P_{noise}}\right)$$