$$H(z) = \frac{\sigma \quad \text{ili } G}{1 + a_1 z^{-1} + \dots + a_p z^{-p}}$$

$A(z)$ ... inv. filt.

$A(z) = 1 - \alpha_1 z^{-1} \dots\dots - \alpha_p z^{-p}$

$P(z) = \alpha_1 z^{-1} + \dots + \alpha_p z^{-p}$

?

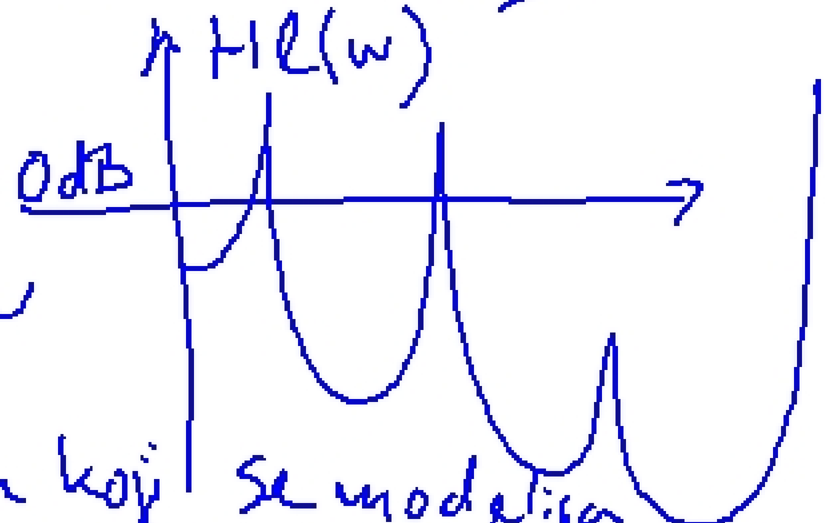
Za all-pole sustav sa $G = 1$

$$H(e^{j\omega}) \rightarrow 20 \cdot \log_{10}(|\quad|)$$

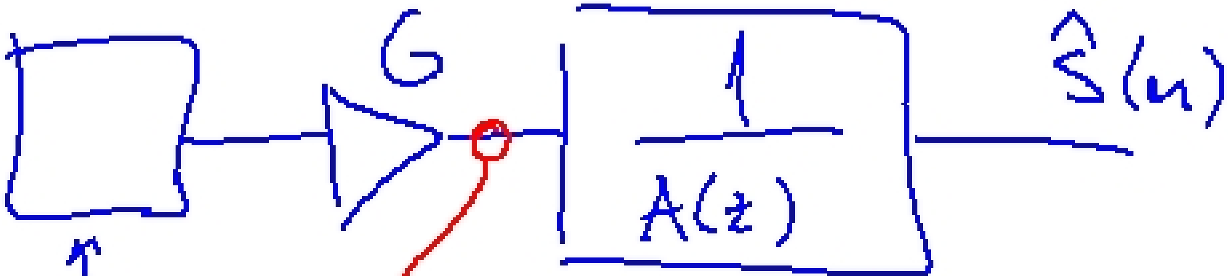
$$H_e(\omega) = 20 \cdot \log_{10}(|H(e^{j\omega})|)$$

Vrijedi:

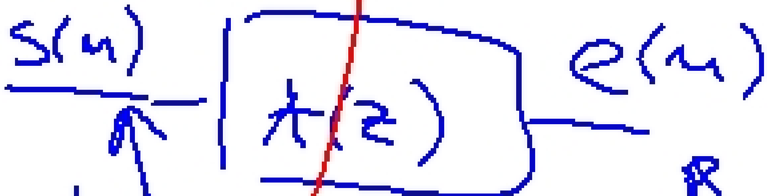
$$\bar{H}_e = \frac{1}{2\pi} \int_0^{2\pi} H_e(\omega)\, d\omega$$



nivo signala koji se modelira



pobudni signal jed. energije



stvarni govor

promatramo energiju

$$E_n = \sum_m e_n^2(m)$$

neka bude $= E_n$

koliko treba biti energija ovog sig.

za $v(n)=\delta(n)$

$\Rightarrow$ odgovara (liči) na slučaj periodične pobude sa nizom jediničnih imp.

$$\sum_m u_n^2(m) = 1$$

u intervalu lin. pred.

$\Rightarrow$ $G^2 = E_n$, tj. $G=\sqrt{E_n}$

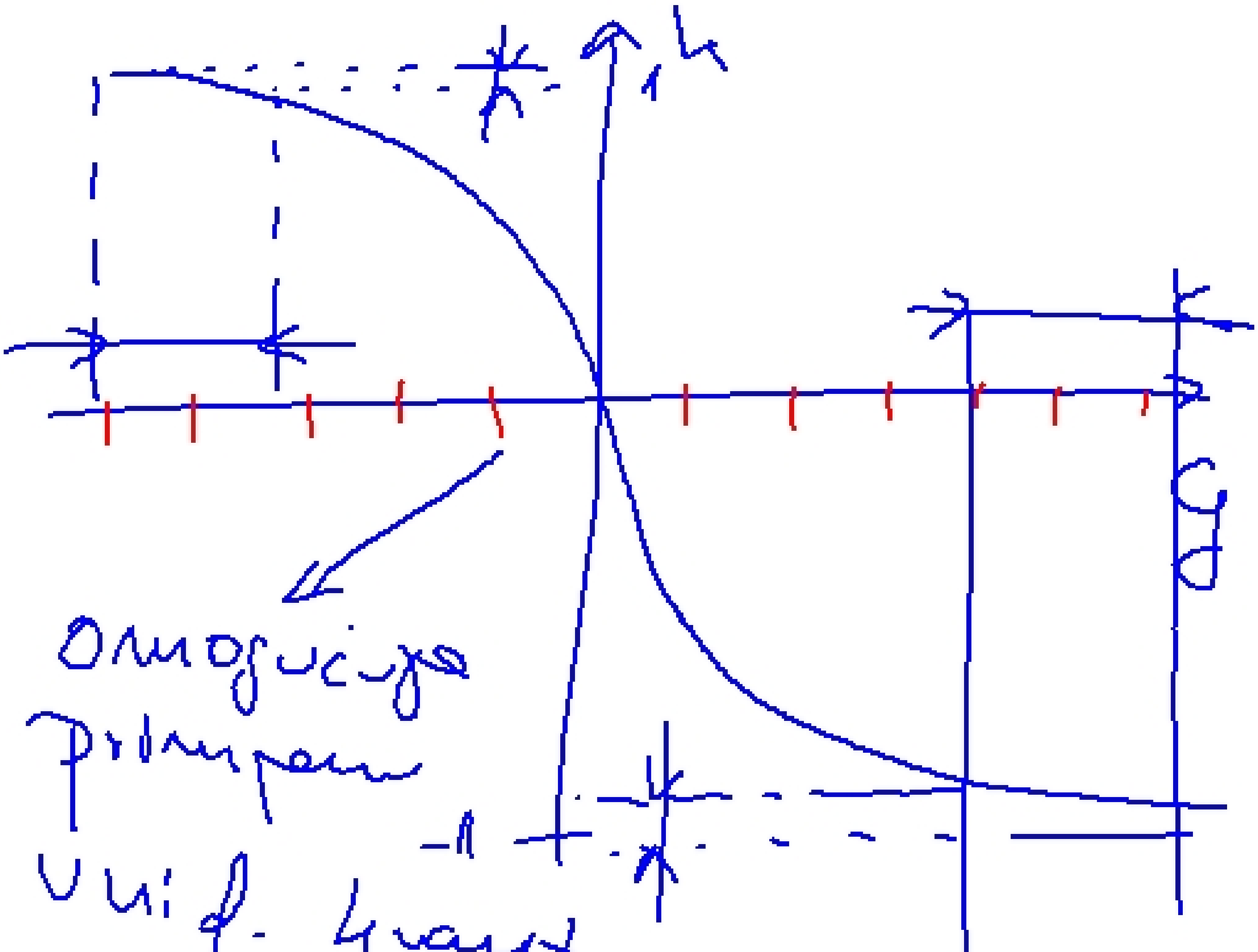
$$E_n = \Phi_n(0,0) - \sum_{k=1}^{P} \alpha_k \Phi_n(k,0)$$

$$V_n = \frac{E_n}{\Phi_n(0,0)} = 1 - \sum_{k=1}^{P} \alpha_k \frac{\Phi_n(k,0)}{\Phi_n(0,0)}$$

$V_n = 1$ ... nema dobitka od predikcije

$V_n < 1$ ... dobitak.

$$V_{n\,log} = 10 \cdot \log_{10}(V_n) \; [dB]$$



omogućuje primjenu unif. kvant