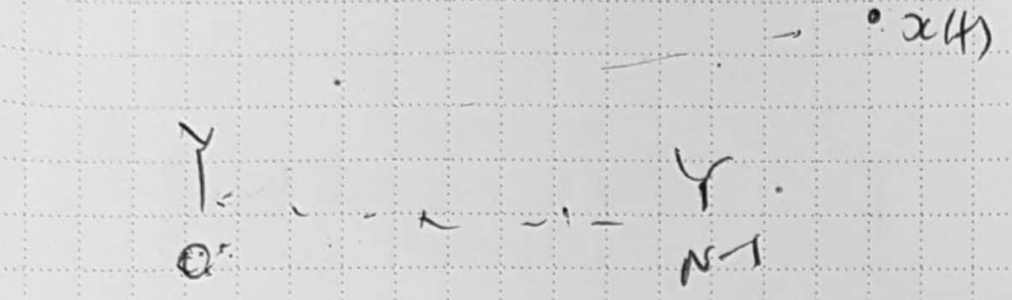

$$x_{ref}(t,\theta) = x_{\theta}(t - \tau_{pd_0})$$

$$x_n(t,\theta) = x_{\underset{\theta}{ref}}(t - \tau_n(\theta)) + \sum_{m=0}^{N-1} \beta_m x_m(t - \tau_{tx} - \tau_{pd} - \tau_n(\theta))$$

$F \downarrow$

$$X_n^F(\omega,\theta) = X_{ref}^F(\omega) e^{-j\omega\tau_n(\theta)} + \sum_{m=0}^{N-1} \beta_m X_m^F(\omega,\theta)$$

$$e^{-j\omega(\tau_{tx} + \tau_{pd} + \tau_n(\theta))}$$

נגדיר קלט חדש פיזור / $X^F(\omega)$ (בתאפי. לא תלוי ב θ)

$$X_n^F(\omega,\theta) = X^F(\omega) e^{-j\omega\tau_{pd}} e^{-j\omega\tau_n(\theta)} + \sum (\ldots)$$

$$\underline{d} = \begin{bmatrix} e^{-j\omega\tau_0(\theta)} \\ e^{-j\omega\tau_1(\theta)} \\ \vdots \\ e^{-j\omega\tau_{N-1}(\theta)} \end{bmatrix}$$

$$\underline{X}^F(\omega,\theta) = e^{-j\omega\tau_{pd}} X^F(\omega) \underline{d}(\omega,\theta) + \underline{d}\, \beta^T \underline{X}^F(\omega,\theta) e^{-j\omega(\tau_{tx} + \tau_{pd})}$$

$$\tilde{d} = e^{-j\omega\tau_{pd}} \underline{d}$$

$$\underline{X}^F(\omega,\theta) = \underline{\tilde{d}} \left[\left(X^F(\omega) + \underline{\beta}^T \underline{X}^F(\omega,\theta) \, e^{-j\omega\tau_{Fx}} \right) \right]$$

$$\underline{X}^F(\omega,\theta) = \left[I - \underline{\tilde{d}} \, \underbrace{\underline{\beta}^T e^{-j\omega\tau_{Fx}}}_{\underline{\tilde{\beta}}^T} \right]^{-1} \underline{\tilde{d}} \, X^F(\omega)$$

$$= \left(I - \underline{\tilde{d}} \left(1 + \underline{\tilde{\beta}}^T \underline{\tilde{d}} \right)^{-1} \underline{\tilde{\beta}}^T \right) \underline{\tilde{d}} \, X^F(\omega)$$

$$= \underline{\tilde{d}} \left(1 - \frac{\underline{\tilde{\beta}}^T \underline{\tilde{d}}}{1 + \underline{\tilde{\beta}}^T \underline{\tilde{d}}} \right) X^F(\omega)$$

$$= \underline{\tilde{d}} \, \frac{1}{1 + \underline{\tilde{\beta}}^T \underline{\tilde{d}}} \, X^F(\omega)$$

• [illegible]

+ Σ_{tx}

הרחבה

+ multipath.

+ תיקון ערוץ.

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