

$$C^T = (C_1 \quad C_2)$$

$$\underline{C}^T \cdot \underline{x} + \underline{D} \cdot U = \underline{C}^T \left(\underset{\begin{pmatrix} \nabla \\ \nabla \end{pmatrix}}{\underline{x}_{e1}} e^{\lambda_1 t} + \underset{\begin{pmatrix} \blacksquare \\ \square \end{pmatrix}}{\underline{x}_{e2}} e^{\lambda_2 t} + \underline{x}_g \right) + \underline{D} \cdot U$$

$$y = \underbrace{(\neq 0) \begin{pmatrix} \nabla \\ \nabla \end{pmatrix} e^{\lambda_1 t} + (\neq 0) \begin{pmatrix} \blacksquare \\ \square \end{pmatrix} e^{\lambda_2 t}}_{\text{transients}} + \underbrace{\left(\underline{C}^T \cdot \underline{x}_g + \underline{D} \cdot U \right)}_{\text{stationärwert}}$$

$$\underline{x}(t) = \underbrace{\underline{m}_1 \cdot \underline{k}_1}_{\underline{x}_{e1}} e^{\lambda_1 t} + \underbrace{\underline{m}_2 \cdot \underline{k}_2}_{\underline{x}_{e2}} e^{\lambda_2 t} + \underline{x}_g$$

$$\Rightarrow \underline{x}_e = \begin{pmatrix} \nabla & \blacksquare \\ \nabla & \square \end{pmatrix}$$