M. tetel Tobbiosos gejosos, Somite-interpolació  $|\lambda = -\Delta | = D_n(\lambda) = \frac{1}{||\lambda||} (\lambda - \lambda_{\ell})^{d_{\ell}} / \sum_{s=1}^{s} d_{\epsilon} = n$  $\Delta(\lambda) = \frac{1}{11}(\lambda - \lambda_{\epsilon})^{\xi R}, \quad S \subset \sum_{q=1}^{S} t_{q} = m \leq m$  $S(z) = \sum_{k=1}^{\infty} C_k z^k = \lim_{N \to \infty} \sum_{k=1}^{N} C_k z^k = \lim_{N \to \infty} S_N(z)$  $S_N(z) = \Delta(z) \cdot q(z) + R_N(z)$ S1(2) - (2) - (2) + RN(2) SN(2) = RN(2) S'(2) = RN (72) -7 ment S(Z) -. S'(Z) is S(ter) (1) = R(tex-1) (1) Tartaltinarea a (2-1/2) Ez 5 = m felletel > Hermite-interpolação  $S_{N}(z) = \sum_{k=1}^{S} \sum_{\nu=1}^{T_{k}} S_{N}(\lambda_{k}) \cdot H_{R(\nu_{k})}(z)$  $f(z) = \sum_{N \to \infty} \lim_{N \to \infty} \int_{N} (\lambda_{z}) \cdot H_{z(N-z)}(z)$   $f(\underline{A}) = \sum_{N \to \infty} \int_{N} (\lambda_{z}) H_{z(N-z)}(z)$ 

$$(A - \lambda_{\epsilon}E)^{\epsilon} \cdot H_{\epsilon}(A) = 0$$

net oxthete a minimal polinomenal

Schur-tetel segitsegovel beläthete, hagy  $S(A-\lambda_{E}E)^{T_{E}} > n-\lambda_{E}$ Hea(4) projektor, es rangja  $\lambda_{E}$ .

$$H_{ev}(\underline{A}) = \frac{1}{v!} (\underline{A} - \lambda_{e} \underline{E})^{v} H_{eo}(\underline{A})$$

Her (A) NO eseten rilpotens

Matrixor svaridiagonalizalasa

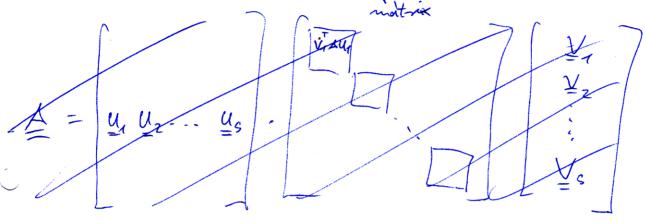
$$f(z) = Z$$

$$f(z) = A = \sum_{k=1}^{S} \lambda_k \cdot H_{Ro}(A) + 1 \cdot H_{R_1}(A) = \sum_{k=1}^{S} \lambda_k \cdot H_{Ro}(A) + (A - \lambda_k E) H_{Ro}(A) = \sum_{k=1}^{S} \lambda_k \cdot H_{Ro}(A) + (A - \lambda_k E) H_{Ro}(A) = \text{noncond} A \text{ povi-}$$

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$$= \sum_{k=1}^{S} \lambda_k \cdot H_{Ro}(A) + (A - \lambda_k E) H_{Ro}(A) = H_{Ro}(A)$$

-11/2-



$$\forall_{p}^{\top} \triangleq U_{p} = \lambda_{p} \equiv \lambda_{p} + \forall_{p}^{\top} (4 - \lambda_{e} \equiv) U_{p}$$

$$\begin{array}{c} V_1 \\ V_2 \\ \vdots \\ V_5 \\ \end{array}$$

$$\begin{array}{c} U_1 \\ U_2 \\ \end{array}$$

$$\begin{array}{c} U_2 \\ \end{array}$$

$$\begin{array}{c} V_2 \\ \end{array}$$

$$\begin{array}{c} V_2 \\ \end{array}$$

$$\begin{array}{c} V_3 \\ \end{array}$$

$$\begin{array}{c} V_4 \\ \end{array}$$

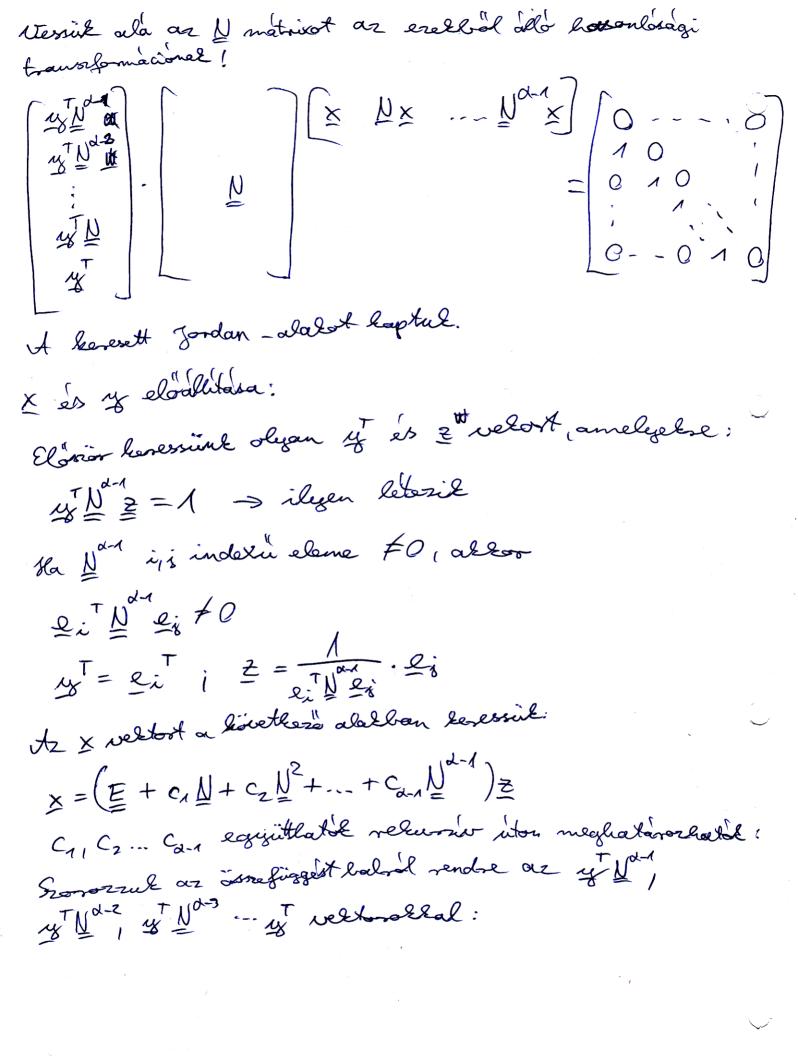
$$\begin{array}{c} V_5 \\ \end{array}$$

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Vilpoteus matical transformación Jordan-felle nomalalakoa. Minden & rendu N milpotens matrix hasonlosagi transformacional also (felso) Jordan-fele normalalatra horhato, a normalalat matrixa egyetlen also (felio) Jordan - blokk. Biz: Ha ar & readir nilp. me nemderogatorius, alla: N =0 ; N x-1 ×0 The talahati olyan x is y veltor, amelyelse: WX = W NX = --- = W N X = 0 UN X = 1 Vegerrier a reveller vertorsendoret: Ez teljes biostogonalis vektorsendores:



$$y \stackrel{1}{N} \stackrel{2}{\times} = y \stackrel{1}{N} \stackrel{2}{\times} = 1 \Rightarrow \text{automatikusan teljesül}$$

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Enerthal: 
$$C_1 = -48 \underbrace{N}_{2}^{d-2} = C_2 = -48 \underbrace{N}_{2}^{d-2} = +(48 \underbrace{N}_{2}^{d-2})^{2}$$
:

A transformale matrix veltorait foveltoroknet neverzist.

De regatories nilpotens matrixol eseten:

Ninderse BCX, érent NP-1 70, de NB=0

Alger tz eljárás lasonló a nemderogatórius esethez, azzal a kidombséggel, hogy az x, és y vektorokkal képzett Viortoganális vektorrendszer nem teljes, Ezért est teljessé kell tenniak

Az ions meest veltorokkal hiegerritue a forvertorokat, teljes biortogonalis veltorsendorest kapunk.

Az ereklal keprett haronlasagi trafanal alavetue az U matrixot;

$$= \begin{bmatrix} \frac{3}{6} & 0 \\ 0 & \tilde{N}_{ap} \end{bmatrix}$$

Stearidiagonal - matrix &, amelylen B-rendu Jordan - Sloke is d-B rendu Al nilpotens metrix al.

Mayanest ar eljavast velges samme lepesten elvegesve megleapjel a Jordan-alatot.