

$$\eta_k = [DF(\cdot) - g\lambda_k DH(\cdot)]\eta_k. \quad (1)$$

$\eta_k \in \mathbb{R}^n$, $k = 1, \dots, N$. G is a $(2N) \times (2N)$ matrix. $\alpha = g\lambda_k$.

$$\eta = [DF(\cdot) - \alpha DH(\cdot)]\eta. \quad (2)$$

$\Psi(\alpha) = \sum_{k=1}^N \Psi(g\lambda_k)$. Ψ_* is the minimum value of $\Psi(\alpha)$. $\Psi_* > 0$.

$$x_i = -(\dots), \quad x_i = +0, \quad (3)$$

$$= 0. + x(\dots).$$

$d = \dots$, $X = \dots$. $\Psi(\alpha)$ is a function of α . $\alpha \rightarrow 0^+$. $\Psi(\alpha)$ is a function of α . $\alpha \approx 1$. N . $\{a_i\}_{i=1}^N$. G .

$$G = \begin{pmatrix} b_1 & -a_1 & 0 & 0 & \cdots & 0 & -a_N \\ -a_1 & b & -a & 0 & \cdots & 0 & 0 \\ 0 & -a & b & -a & \cdots & 0 & 0 \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ -a_N & 0 & 0 & 0 & 0 & -a_{N-1} & b_N \end{pmatrix}, \quad (4)$$

$$b_i = (a_{i-1} + a_i), \quad i = 1, \dots$$

Handwritten musical notation on a page. The notation includes various notes, rests, and symbols. Key elements include:

- Staff 1: g
- Staff 2: $(\circ)E$
- Staff 3: (\circ)
- Staff 4: $g = 1.4$
- Staff 5: $(\alpha = 4.4$
- Staff 6: E
- Staff 7: $(\circ)E$
- Staff 8: $(\circ)E$
- Staff 9: $(\circ)E$
- Staff 10: $(\circ)E$
- Staff 11: $i \approx$

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$b_{k+1}(\xi) = \dots k_{k+1} \cdot E_j(\dots)$
 \dots
 \dots
 \dots
 \dots