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**INTERPOLATION BY ENTIRE FUNCTIONS
FROM de BRANGES'S SPACES**

Let E be an entire function satisfying the condition $|E(\bar{z})| < |E(z)|$, $z \in \mathbb{C}_+$. De Branges space $\mathcal{H}(E)$ consists of the entire functions F such that $F(z)/E(z)$, $\overline{F(\bar{z})}/E(z)$ belongs to Hardy class H_+^2 .

The space $\mathcal{H}(E)$ is Hilbert space with respect to the scalar product

$$\langle F, G \rangle := \int_{\mathbb{R}} F(x) \overline{G(x)} / |E(x)|^2 dx, \quad F, G \in \mathcal{H}(E)$$

Interpolation problem

$$F(\lambda_j) = c_j, \quad \lambda_j \in \Lambda, \quad F \in \mathcal{H}(E)$$

is formulated in the following way : find conditions for a sequence Λ and a weight sequence $\{b_j\}_{-\infty}^{+\infty}$ ($b_j > 0$), under which the interpolated operator

$$J_{\Lambda} F : \{F(\lambda_j) : \lambda_j \in \Lambda\}$$

maps bijectively and bicontinuously de Branges space $\mathcal{H}(E)$ onto weight space $l_2\{b_j\}$ with norm

$$\|c\| = \sum_{k=-\infty}^{\infty} |c_k|^2 b_k, \quad c = \{c_k\}_{-\infty}^{+\infty}$$

Under some restriction to behavior of the sequence Λ near real axis there is given complete solution of the formulated problem.