

Nevanlinna-pick interpolation

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Abstract

Let \mathbb{D} denote the unit disc in the complex plane centered at the origin. Let $n \in \mathbb{N}$, $\lambda_1, \dots, \lambda_n \in \mathbb{D}$ (distinct points) and $\omega_1, \dots, \omega_n \in \mathbb{D}$ (may not be distinct). In this talk, we shall see under what conditions there exists a holomorphic function $\phi : \mathbb{D} \rightarrow \mathbb{D}$ such that $\phi(\lambda_i) = \omega_i$, $i = 1, \dots, n$.