

Linear Maps Preserving the Local Spectral Radius
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Abstract: Let $M_n(\mathbb{C})$ be the algebra of all $n \times n$ complex matrices. The local spectral radius of a matrice $T \in M_n(\mathbb{C})$ at a point $x \in \mathbb{C}^n$ is defined by

$$r_T(x) := \limsup_{k \rightarrow +\infty} \|T^k x\|^{\frac{1}{k}}.$$

In this talk, we describe linear maps from $M_n(\mathbb{C})$ into itself that preserve the local spectral radius at a fixed point $x \in \mathbb{C}^n$.

Admissible Majorants of Model Subspaces
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Abstract: Model subspaces K_Θ are the only "closed" subspaces of the Hardy space H^2 which are invariant under the backward shift operator. A positive continuous function w is called admissible for K_Θ if there is an $f \in K_\Theta$, $f \not\equiv 0$ such that $|f| \leq w$. We will discuss $Adm\Theta$, the set of all admissible majorants of K_Θ .