

İSTANBUL ANALYSIS SEMINARS

POLYNOMIALS ON S^* -PARABOLIC MANIFOLDS

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Abstract: A complex manifold M is said to be S^* -*parabolic* if it possesses a continuous plurisubharmonic function Φ that is maximal outside a compact subset of M . In analogy with $(\mathbb{C}^n, \log \|z\|)$, one defines (Φ) -polynomials as analytic functions f on M with the property that there exist positive integers d and c such that $|f(z)| \leq d\Phi + c$ for all $z \in M$.

In the first part of the talk, we will review different notions of parabolicity for complex manifolds and look at them from a functional analysis point of view. In the second part of the talk, we will discuss polynomials on S^* -parabolic manifolds. Most of what I will report in this talk is joint work with A. Sadullaev.

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