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LINEAR TOPOLOGICAL INVARIANTS OF SPACES OF HOLOMORPHIC FUNCTIONS IN INFINITE DIMENSION

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Abstract

It is shown that if E is a Frechet space with the strong dual E^* then $H_b(E^*)$, the space of holomorphic functions on E^* which are bounded on every bounded set in E^*, has the property (DN) when $E \in (DN)$ and that $H_b(E^*) \in (\Omega)$ when $E \in (\Omega)$ and either E^* has an absolute basis or E is a Hilbert-Frechet-Montel space. Moreover the complementness of ideals $J(V)$ consisting of holomorphic functions on E^* which are equal to 0 on V in $H(E^*)$ for every nuclear Frechet space E with $E \in (DN) \cap (\Omega)$ is stablished when $J(V)$ is finitely generated by continuous polynomials on E^*.

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