THE DUAL OF THE SPACE OF HOLOMORPHIC FUNCTIONS ON LOCALLY CLOSED CONVEX SETS

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Abstract

Let $H(Q)$ be the space of all the functions which are holomorphic on an open neighbourhood of a convex locally closed subset Q of $\mathbb{C}^N$, endowed with its natural projective topology. We characterize when the topology of the weighted inductive limit of Fréchet spaces which is obtained as the Laplace transform of the dual $H(Q)'$ of $H(Q)$ can be described by weighted sup-seminorms. The behaviour of the corresponding inductive limit of spaces of continuous functions is also investigated.