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  - ⬚Intrepolation problems in Hörmander algebras
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We call Hörmander algebras the spaces $A_p(\mathbb C)$ of entire functions $f$ such that, for all $z$ in $\mathbb C$, $$ |f(z)|\leq Ae^{Bp(z)}, $$ where $A$ and $B$ are some positive constants (depending on $f$) and $p$ is a subharmonic weight. We consider the following interpolation problem :

Given a discrete sequence $\{a_j\}$ of complex numbers and a sequence of complex values $\{b_j\}$, under what conditions does there exist a function $f\in A_p(\mathbb C)$ such that $f(a_j)=b_j$ for all $j$ ?

In other words, what is the trace of $A_p(\mathbb C)$ on $\{a_j\}$ ? We say that $\{a_j\}$ is an interpolating sequence if the trace is defined by the space of all $\{b_j\}$ satisfying $|b_j|\leq A'e^{B'p(a_j)}$, for some constants $A',B'>0$. We use Hörmander's $L^2$-estimates for the $\bar\partial$-equation to describe the trace when the weight $p$ is radial and doubling and to characterize the interpolating sequences for more general weights.



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11 images