The Kohn Algorithm in More General Classes of Functions

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In 1979 Joseph J. Kohn introduced an algorithm that yields ideals of subelliptic multipliers which measure whether there is gain in regularity of the solution of the dbar-Neumann problem on a pseudoconvex domain in complex n-space. If such a domain is defined by a real analytic function, subellipticity of the dbar-Neumann problem is equivalent to the Kohn algorithm generating the entire ring of real analytic functions. I will discuss what happens to this equivalence for local rings of functions that are strictly larger than the local ring of real analytic functions, in particular the local rings of the Denjoy-Carleman (quasianalytic) classes of functions.