Andreea C Nicoara* (anicoara@math.harvard.edu), Department of Mathematics, Harvard University, 1 Oxford St., Cambridge, MA 02138. The Kohn Algorithm in More General Classes of Functions. Preliminary report.

In 1979 Joseph J. Kohn introduced an algorithm that yields ideals of subelliptic multipliers. On a real analytic pseudoconvex domain, subellipticity of the $\bar{\partial}$ -Neumann problem is equivalent to the Kohn algorithm generating the entire ring of real analytic functions. I will discuss what happens to this equivalence when one considers local rings of functions that are more general than the ring of real analytic functions. (Received February 07, 2006)