1016-32-31 **Jae-Seong Cho*** (jcho@math.uiuc.edu), 273 Altegeld Hall, MC-382, 1409 W. Green street, Urbana, IL 61801. *An algebraic version of subelliptic multipliers.* Preliminary report.

In this talk I will consider an algebraic generalization of subelliptic multipliers, which is invented by Kohn in 1979 in oder to prove subelliptic estimates for the $\bar{\partial}$-Neumann problem. While subelliptic multipliers arose in several complex variables, many facets of their theory and applications are algebraic.

The algebraic approach here, although not particularly useful for the original problem, has several advantages of developing the Kohn's algorithm to more general setting and of establishing new results. For example, subelliptic multipliers can be constructed in the ring of formal power series and has similar results to in the ring of convergent power series. (Received January 11, 2006)