

1030-32-420

**David S Tartakoff\*** ([dst@uic.edu](mailto:dst@uic.edu)). *Regularity of solutions of non-subelliptic PDE's.*

Recent results of J.J. Kohn have shown that in the complex case, one can have hypoellipticity with large loss of derivatives without conventional subellipticity. We will give an alternate proof of this result, prove analytic hypoellipticity for these and related operators, and Gevrey regularity for Oleinik type operators related to the non-hypoelliptic example of Christ. (Received August 08, 2007)