

1040-35-38

Nicholas Hanges* (nicholas.hanges@lehman.cuny.edu), Department of Mathematics, Lehman College/CUNY, Bronx, NY 10468. *Analytic Hypoellipticity*. Preliminary report.

We will present recent results on analytic hypoellipticity for operators of the form “sum of squares”. We relate these theorems to Treves’ conjecture. Also, we will discuss the fact that Hörmander’s classical “sum of squares” (hypoellipticity) result does not extend to the hyperfunction class. This is closely related to analytic hypoellipticity. (Received January 10, 2008)