G.O. Hakobyan, V.N. Margaryan Gevrey hypoellipticity for a class of degenerated quasi-elliptic operators

Comment.Math.Univ.Carolinae 44,4 (2003) 637-644.

Abstract: The problems of Gevrey hypoellipticity for a class of degenerated quasielliptic operators are studied by several authors (see [1]–[5]). In this paper we obtain the Gevrey hypoellipticity for a degenerated quasi-elliptic operator in \mathbb{R}^2 , without any restriction on the characteristic polyhedron.

Keywords: Gevrey class, Gevrey hypoellipticity, hypoelliptic operator, degenerated

quasi-elliptic operator

AMS Subject Classification: 35B05, 35H10, 35H35