ON SOME PROPERTIES OF A DIFFERENTIAL OPERATOR ON THE POLYDISK

ROMI SHAMOYAN[1*] AND SONGXIAO LI[2]

Communicated by J. M. Isidro

ABSTRACT. We study the action and properties of a differential operator in the polydisk, extending some classical results from the unit disk. Using so called dyadic decomposition of the polydisk we find precise connections between quazinorms of holomorphic function in the polydisk with quazinorms on the subframe and the unit disk. All our results were previously well-known in the unit disk.

[1] DEPARTMENT OF MATHEMATICS, BRYANSK STATE PEDAGOGICAL UNIVERSITY, RUSSIAN
E-mail address: rsham@mail.ru

[2] DEPARTMENT OF MATHEMATICS, JIAYING UNIVERSITY, 514015, MEIZHOU, GUANG-DONG, CHINA
E-mail address: jyulsx@163.com; lsx@mail.zjxu.edu.cn