

Bandura, A.**New criteria of boundedness of L -index in joint variables for entire functions.** (Ukrainian. English summary) [Zbl 1374.30095](#)

Mat. Visn. Nauk. Tov. Im. Shevchenka 13, 58-67 (2016).

Summary: In the paper we obtain analogues of some criteria of L -index boundedness in joint variables for an entire function $F : \mathbb{C}^n \rightarrow \mathbb{C}$ and a function $L(z) = (l_1(z), \dots, l_n(z)), z \in \mathbb{C}^n$. Formerly such theorems were proved by *M. T. Bordulyak* [Mat. Stud. 4, 53–58 (1995; [Zbl 1023.32500](#))], *M. T. Bordulyak* and *M. M. Sheremeta* [Dopov. Nats. Akad. Nauk Ukr., Mat. Pryr. Tekh. Nauky 9, 10–13 (1993)] for the case $L(z) = (l_1(|z_1|), \dots, l_n(|z_n|))$. We also present new criteria of L -index boundedness in joint variables, which describe the local behaviour of partial derivatives of an entire function in a polydisc.

MSC:**30D60** Quasi-analytic and other classes of functions of one complex variable**32A10** Holomorphic functions of several complex variables**32A40** Boundary behavior of holomorphic functions of several complex variablesCited in **7** Documents**Keywords:**entire function; L -index boundedness; polydisc**Full Text:** [Link](#)