

**$\mathcal{N}(p, q, s)$ -type spaces in the unit ball of \mathbb{C}^n (III):
various characterizations**

By BINGYANG HU (Madison) and SONGXIAO LI (Chengdu)

Abstract. The purpose of this paper is to study various characterizations of a new class of function spaces, called $\mathcal{N}(p, q, s)$ -type spaces, in the unit ball \mathbb{B} of \mathbb{C}^n , via different notions of derivatives. As a corollary, a version of Korenblum's inequality for $\mathcal{N}(p, q, s)$ -type functions was established. Moreover, the mixture and oscillation characterizations of $\mathcal{N}(p, q, s)$ -type spaces are also investigated.

BINGYANG HU
DEPARTMENT OF MATHEMATICS
UNIVERSITY OF WISCONSIN
MADISON, WI 53706-1388
USA

SONGXIAO LI
INSTITUTE OF FUNDAMENTAL
AND FRONTIER SCIENCES
UNIVERSITY OF ELECTRONIC SCIENCE
AND TECHNOLOGY OF CHINA
610054, CHENGDU, SICHUAN
P. R. CHINA

Mathematics Subject Classification: 32A36, 32A37.

Key words and phrases: $\mathcal{N}(p, q, s)$ -type spaces, Korenblum's inequality, characterizations.