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**GEOMETRICAL PROPERTIES OF COMPACTS, GENERATING  
THE RECTANGLE NORMAL DOMAINS IN THE SPASE**

The geometrical structure of smooth compacts  $N_p$  that generate  $p$ -normal domain  $G = \Pi \setminus E$  respect to the coordinate hyperplane  $x_i = 0$  was established in [1].

Using methods of the papers [2], [3] we obtain some geometrical descriptions compact  $N_p$  in general case.

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**References**

- [1] V. A. Shlyk, The strycture of compact sets generating normal domains, and removable singularities for the space  $L_p^1(D)$ , Mathematics of the USSR-Sbornik(1992), 71(2):405
- [2] I. N. Demshin, V. A. Shlyk, Metric characteristics of space ring domains with radial slits that are normal in Grotzschs sense, Journal of Mathematical Sciences (New York), 2008, 150:3, 2013-2017
- [3] I. N. Demshin, V. A. Shlyk On the invariance of compacts generating normal ring open sets under quasiisometries Journal of Mathematical Sciences (New York), 2009, 157:4, 568-572