

MAMEDOV F.I.

POINCARÉ TYPE WEIGHT INEQUALITIES IN DOMAINS WITH AN
ISOPERIMETRIC TYPE CONDITION

Abstract

For the some bounded domains Ω in R^n , $n \geq 2$ with isoperimetrical type conditions \tilde{I}_λ , in partial for the domains $\Omega = \{x = (x', x_n) : |x'| < x_n^\beta, 0 < x_n < a\}$, $a > 0$, $\beta \geq 1$ was proved the sufficient conditions on the weights, under which the Poincaré's type two weighted inequality holds.

Müəyyən sinif məhdud izoperimetrik tip şərtli $\Omega \subset R^n$, $n \geq 2$ oblastlarda, xüsusi halda $\Omega = \{x = (x', x_n) : |x'| < x_n^\beta, 0 < x_n < a\}$, $a > 0$, $\beta \geq 1$ oblastları üçün ikiçəkili

Puankare tipli
$$\left(\int_{\Omega} |u - \bar{u}|^q dx \right)^{1/q} \leq c \left(\int_{\Omega} \omega |\nabla u|^p dx \right)^{1/p}, \quad 1 \leq p \leq q < \infty, \quad k \in C^1(\Omega),$$

$\bar{u} = \left(\int_{\Omega} dx \right)^{-1} \left(\int_{\Omega} u dx \right)$ bərabərsizliyi üçün kafilik şərtləri isbat edilir.