

论文

## TWO BOUNDARY VALUE PROBLEMS FOR THE REGULAR FUNCTIONS WITH VALUES IN A REAL CLIFFORD ALGEBRA IN THE HYPERBALL

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**摘要** In this paper, introducing the concept of "quasi-permutation", we solve the sign problem often met with when the operation is carried out in the incommutable Clifford algebra, and using the results in Hua Luogeng and I. N. Vekua famous works, we give the existence and uniqueness theorem of solution of the two problems of Dirichlet's type for the regular functions with values in a  $2^{n-1}$ -dimensional Clifford algebra  $An(\mathbb{R})$  in the hyperball and the integral representation of the solution of this problem.

**关键词** [Boundary value problem, regular function](#)

分类号

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**Key words** [Boundary value problem](#) [regular function](#) [Clifford analysis](#)

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