

UNIVERSAL INEQUALITIES FOR EIGENVALUES OF QUADRATIC POLYNOMIAL OPERATOR OF THE KOHN LAPLACIAN

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Abstract. In this paper, we investigate the Dirichlet weighted eigenvalue problem of quadratic polynomial operator of the Kohn Laplacian on a bounded domain in the Heisenberg group \mathbb{H}^n . We establish two inequalities for eigenvalues of this problem. One of them implies an explicit estimate for the upper bound of the $(k+1)$ -th eigenvalue in terms of the first k eigenvalues. Moreover, as a special case, we give some universal inequalities and estimates for eigenvalues of the bi-Kohn Laplacian.

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