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Natural boundary value problems for weighted form Laplacians

WOJCIECH KOZŁOWSKI AND ANTONI PIERZCHALSKI

Abstract. The four natural boundary problems for the weighted form Laplacians $L = ad\delta + b\delta d$, $a, b > 0$ acting on polynomial differential forms in the n -dimensional Euclidean ball are solved explicitly. Moreover, an algebraic algorithm for generating a solution from the boundary data is given in each case.

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