



Hardy spaces for the Laplacian with lower order perturbations

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Résumé en anglais

We consider Hardy spaces of functions harmonic on smooth domains in Euclidean spaces of dimension greater than two with respect to the Laplacian perturbed by lower order terms. We deal with the gradient and Schrödinger perturbations under appropriate Kato conditions. In this context we show the usual correspondence between the harmonic Hardy spaces and the L_p spaces (or the space of finite measures if $p=1$) on the boundary. To this end we prove the uniform comparability of the respective harmonic measures for a class of approximating domains and the relative Fatou theorem for harmonic functions of the perturbed operator.

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