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THE SOLUTION OF THE KATO PROBLEM IN TWO DIMENSIONS

STEVE HOFMANN* AND ALAN MCINTOSH

Abstract ____

We solve, in two dimensions, the "square root problem of Kato". That is, for $L \equiv -\operatorname{div}(A(x)\nabla)$, where A(x) is a 2 × 2 accretive matrix of bounded measurable complex coefficients, we prove that $L^{1/2}: L_1^2(\mathbb{R}^2) \to L^2(\mathbb{R}^2)$.

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