

1062-35-125

Ariel E. Barton* (abarton@math.uchicago.edu), 375 Brown Street, #107, West Lafayette, IN 47906. *The Dirichlet problem with BMO boundary data and almost-real coefficients.*

Consider the Dirichlet problem in a Lipschitz domain in the plane. Suppose that the boundary data is in BMO . I will show that, if the coefficients are elliptic, have small imaginary part, and are independent of one of the coordinates, then gradients of solutions satisfy a Carleson-measure condition. (Received August 03, 2010)