



复旦大学数学科学学院
数学综合报告会

报告题目: **创新研究群体学术报告-On C^1 , C^2 , and weak type-(1,1) estimates for linear elliptic operators**

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报告时间: 2016-08-02 星期二 10:00-10:50

报告地点: 光华东主楼 2001

摘要: I will discuss a recent paper with Seick Kim, in which we show that any weak solution to elliptic equations in divergence form is continuously differentiable provided that the modulus of continuity of coefficients in the L^1 -mean sense satisfies the Dini condition. This in particular answers a question recently raised by Yanyan Li and allows us to improve a result of Haim Brezis. We also prove a weak type- $(1,1)$ estimate under a stronger assumption on the modulus of continuity. The corresponding results for non-divergence form equations will also be presented.

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