



## 复旦大学数学科学学院 数学综合报告会

### 数学所综合报告

报告题目: **Neumann Boundary Value Problem for Hessian equations on Convex Domain in  $\mathbb{R}^n$**

报告人: 麻希南 教授

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报告时间: 2016-10-25 星期二 16:00-17:00

报告地点: 光华东主楼 1704

摘要: For the Dirichlet problem on the  $k$ -Hessian equation, Caffarelli-Nirenberg-Spruck (1986) obtained the existence of the admissible classical solution when the smooth domain is strictly  $k-1$  convex in  $\mathbb{R}^n$ . In this talk, we prove the existence of a classical admissible solution to a class of Neumann boundary value problems for  $k$  Hessian equations in strictly convex domain in  $\mathbb{R}^n$ , this was asked by Prof. N. Trudinger in 1987. The methods depends upon the establishment of a priori derivative estimates up to second order. This is the joint work with Qiu Guohuan.

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