



## 复旦大学数学科学学院 数学综合报告会

报告题目: **Rigidity properties of the hypercube via Bakry Emery curvature**

报告人: Christian Florentin Munch

报告时间: 2017-03-21 星期二 14:00—15:00

报告地点: 光华东主楼 1704

摘要: We give rigidity results for discrete Bonnet-Myers diameter bound and Lichnerowicz eigenvalue estimate. Both inequalities are sharp if and only if the underlying graph is a hypercube. The proofs use well-known semigroup methods as well as new direct methods which translate curvature to combinatorial properties. The results can be seen as first known discrete analogues of Cheng's and Obata's rigidity theorems.

非线性数学模型与方法教育部重点实验室  
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上海市现代应用数学重点实验室  
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