



复旦大学数学科学学院 数学综合报告会

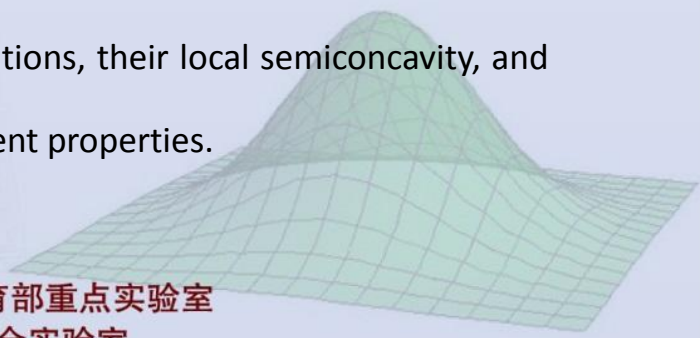
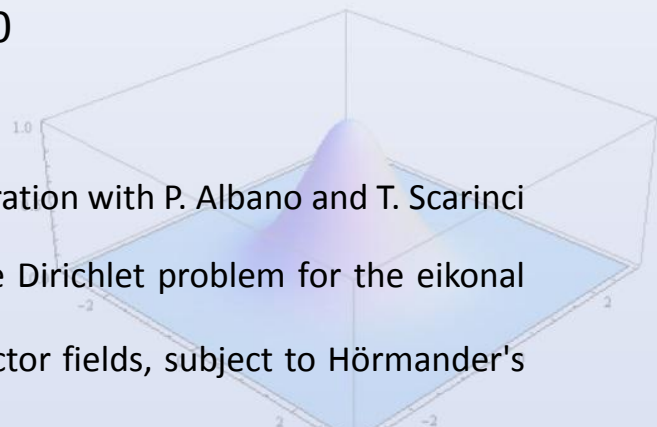
报告题目: **Regularity for the minimum time function with Hörmander vector fields**

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报告时间: 2017-06-12 星期一 10:00

报告地点: 光华东主楼 1801

摘要: We will present recent results in collaboration with P. Albano and T. Scarinci on the regularity of the viscosity solution of the Dirichlet problem for the eikonal equation associated with a family of smooth vector fields, subject to Hörmander's bracket generating condition. Due to the presence of characteristic boundary points, singular trajectories may occur in this case. One can show that, on such trajectories, the solution loses point-wise Lipschitz continuity though remaining smooth in the complement of a closed set of measure zero. In general, one can prove that the local Lipschitz continuity of solutions, their local semiconcavity, and the absence of singular trajectories are equivalent properties.



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