



复旦大学数学科学学院 数学综合报告会

报告题目: On the problem of uniqueness in the Calculus of Variations

报告人: Professor Jan Kristensen (University of Oxford, UK)

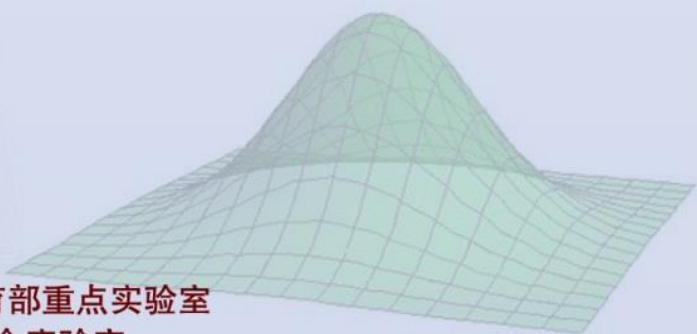
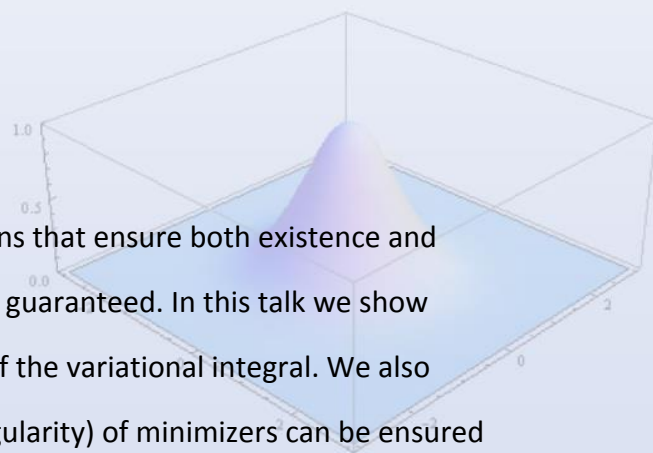
时间: 2025-09-23 星期二 15:30-16:30

地点: 光华东主楼2201

报告摘要:

It is well-known that even under favorable conditions that ensure both existence and (partial) regularity of minimizers their uniqueness is not guaranteed. In this talk we show how exactly uniqueness is connected to the convexity of the variational integral. We also give some results showing how the uniqueness (and regularity) of minimizers can be ensured using smallness conditions on the data. It is important to emphasize that these smallness conditions are too weak to allow for a direct application of any known Implicit Function Theorem.

The talk is based on joint work with Judith Campos Cordero (Mexico City), Bernd Kirchheim (Leipzig), and Jan Kolar (Prague).



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