



## 复旦大学数学科学学院 数学综合报告会

报告题目: Asymptotics of the Charlier polynomials via difference equation methods

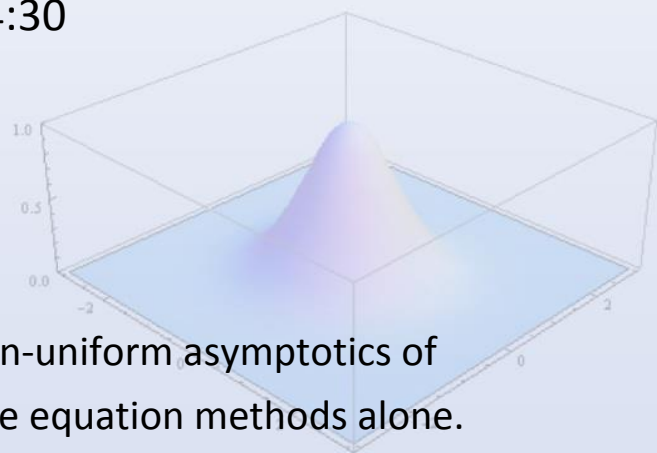
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时间: 2021-03-16 星期二 13:30--14:30

地点: 腾讯会议 ID: 990 900 775

报告摘要:

In this talk, we will present uniform and non-uniform asymptotics of the Charlier polynomials by using difference equation methods alone. The Charlier polynomials are special in that they do not fit into the framework of the turning point theory, despite the fact that they are crucial in the Askey scheme. Asymptotic approximations are obtained respectively in the outside region, an intermediate region, and near the turning points. In particular, we obtain uniform asymptotic approximation at a pair of coalescing turning points with the aid of a local transformation. This is joint work with Xiaomin Huang and Yuqiu Zhao.



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