



复旦大学数学科学学院

数学综合报告会

报告题目: Tau-functions in integrable systems: the matrix-resolvent method

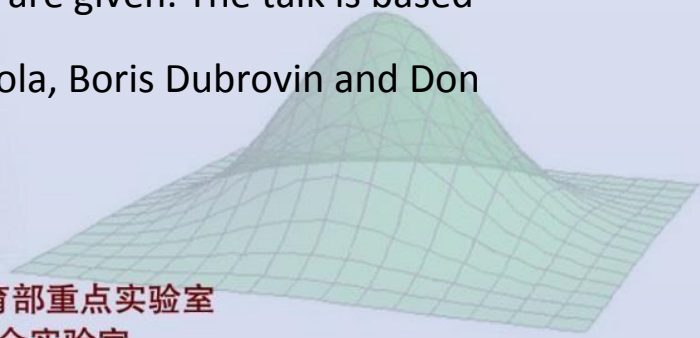
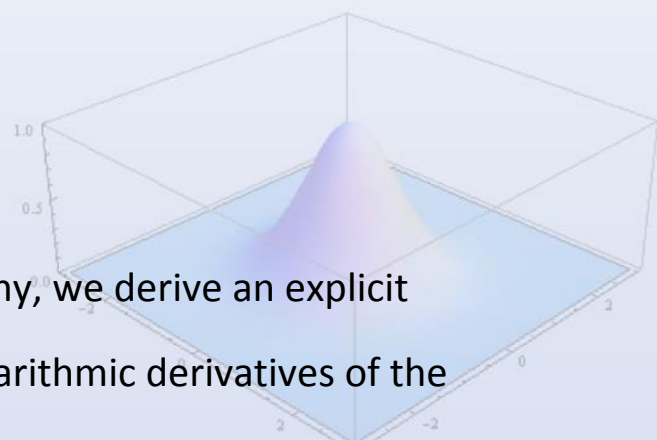
报告人: 杨迪 教授 (中国科学技术大学)

时间: 2023-04-25 星期二 15:30-16:30

地点: 腾讯会议 ID: 414-785-420

报告摘要:

For an arbitrary solution to the KdV hierarchy, we derive an explicit formula for the generating series of the logarithmic derivatives of the tau-function of the solution in terms of matrix resolvents. Then, using the wave functions, we derive two additional explicit formulae. We also extend these results to the Toda lattice hierarchy. Applications to computing certain enumerative invariants are given. The talk is based on a series of joint works with Marco Bertola, Boris Dubrovin and Don Zagier.



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