



复旦大学数学科学学院 数学综合报告会

报告题目: Torus-covering knot groups and their irreducible metabelian ${}_{\mathbb{S}\mathrm{U}(2)}$ -representations

报告人: Prof. Inasa Nakamura (University of Pittsburgh)

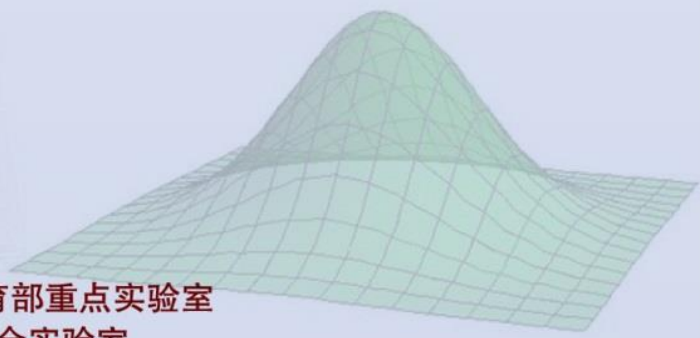
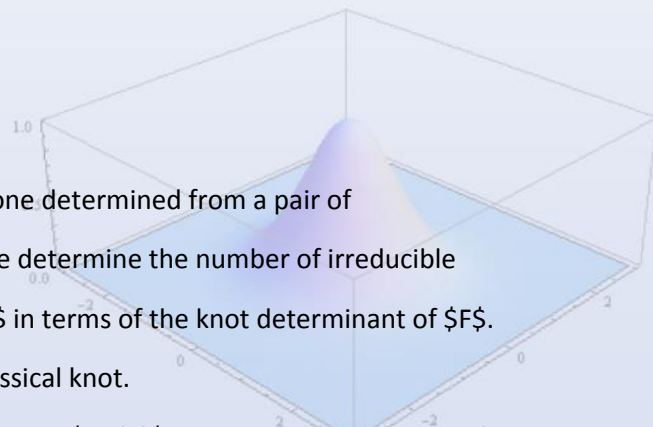
时间: 2025-09-09 星期五 08:30—09:30

地点: 光华东主楼1601

报告摘要:

A torus-covering T^2 -knot is a surface-knot of genus one determined from a pair of commutative braids. For a torus-covering T^2 -knot K , we determine the number of irreducible metabelian ${}_{\mathbb{S}\mathrm{U}(2)}$ -representations of the knot group of K in terms of the knot determinant of K . It is similar to the result due to Lin for the knot group of a classical knot.

Further, we investigate the number of irreducible metabelian ${}_{\mathbb{S}\mathrm{U}(2)}$ -representations using Fox's $\mathbb{S}\mathfrak{p}$ -colorability.



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