



复旦大学数学科学学院 数学综合报告会

报告题目: strong monodromy conjecture for hyperplane arrangements

报告人: 杨瑞杰 (堪萨斯大学)

时间: 2026-05-29 星期五 16:00-17:00

地点: 光华楼东主楼1801

报告摘要:

To control the asymptotic of p -adic exponential sums, Igusa proposed the Strong Monodromy Conjecture, which predicts that the p -adic zeta function of an integer coefficient polynomial is governed by the D -module theory over complex numbers. However, there are very few known cases. In this talk, I will explain my recent joint work with Dougal Davis, where we prove this conjecture for any hyperplane arrangement, based on our new theory of multivariate V -filtration and its interaction with the theory of mixed Hodge modules.

非线性数学模型与方法教育部重点实验室
中法应用数学国际联合实验室
上海市现代应用数学重点实验室
复旦大学数学研究所