



复旦大学数学科学学院 数学综合报告会

报告题目: **Toeplitz, Morse, and Fibonacci Conjugacy Classes**

报告人: Professor Michael Keane

(visiting Professor at NYU Shanghai)

报告时间: 2017-03-08 星期三 15:00—16:00

报告地点: 光华东主楼 1801

摘要: In many branches of mathematics, classification problems remain central. Sometimes beautiful results emerge (e.g. five regular solids), in other cases understanding only is possible in a limited manner after much work and intricate calculations (e.g. four color theorem), and in yet others one remains with hope but without clear answers (e.g. the current state of the ABC conjecture). In this lecture I want to discuss the classification of a special, apparently simple, class of dynamical systems which we call substitutions. My plan is as follows. After defining substitutions and explaining what it means for two primitive (i.e. “irreducible”) substitutions to be conjugate, my intention is to show three important conjugacy classes and explain how (with proof ideas) and in which sense one class (the Toeplitz class) contains three elements (which I explicit), a second class ...

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