



复旦大学数学科学学院 数学综合报告会

报告题目: On the quantum K-theory of flag varieties

报告人: 李长征 教授 (中山大学)

时间: 2020-12-25 星期五 16:00 - 17:00

地点: 光华楼东主楼2201

报告摘要:

In this talk, we will introduce the (torus-equivariant) quantum K-theory of flag varieties G/P . We will discuss the sum of the Schubert structure coefficients in the equivariant quantum K-theory of flag varieties G/P . We will show that the sheaf Euler characteristic of the equivariant quantum K-product of a Schubert class and an opposite Schubert class is equal to qd , where d is the smallest degree of a rational curve joining the two Schubert varieties. We will also discuss a cyclic group action on the quantum K-theory of complex Grassmannians and its consequences. This is based on my joint works with Anders Buch, Sjuvon Chung, Leonardo Mihalea, and Mingzhi Yang.

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