

课程介绍

课程题目: Introduction to K-stability

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课程简介:

K-stability was first introduced by Tian to characterize the solution of the Kähler-Einstein problem on Fano varieties. In the last decade, a purely algebraic geometric study of K-stability has prospered, based on the birational classification theory of varieties centered around the minimal model program. As one of the most important consequences, the K-moduli theory for Fano varieties has been established using purely algebraic methods.

课程安排:

In this lecture series, we will give an overview of the recent progress in the algebraic theory of K-stability. In the first part, we will discuss Fujita-Li's valuative criterion, and introduce the alpha-invariant and delta-invariant. In the second part, we will discuss the construction of K-moduli spaces from purely algebraic methods, in particular focusing on openness and properness. In the third part, we will discuss methods to check K-stability for explicit Fano varieties, and introduce the wall crossing framework for K-moduli spaces of log Fano pairs.

具体详情见:

<http://www.cim.nankai.edu.cn/2022/0627/c11453a460256/page.htm>