



Mathematics Colloquium

Geometry of algebraic stacks

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Abstract

Algebraic stacks form a fundamental mathematical structure in algebraic geometry. Specifically, they provide powerful tools to study the equivariant geometry of a group acting on a variety and are indispensable in the study of moduli spaces. This talk will begin with a gentle introduction to algebraic stacks. I will then state a general result on the local geometry of algebraic stacks asserting that essentially every naturally occurring algebraic stack is locally a quotient stack. I will then provide applications of this result to equivariant geometry and to the birational geometry of the moduli space of curves.

Wednesday, 29 November 2017, 4pm

Smith Hall 204

Tea and refreshments will be served at 3:45pm.