

Colloquium

TUESDAY, JANUARY 23, 2007

RAI 121

4–5PM

Who's afraid of algebraic stacks?

Max Lieblich

(PRINCETON UNIVERSITY)

Algebraic stacks were first introduced in the 1960s in the study of moduli problems and as an attempt to begin importing homotopy theory into algebraic geometry. It has become clear within the last decade that they are indispensable, and much progress has been made in understanding their geometry. I will discuss the origins of and philosophy behind the theory of stacks and describe how one can use them to approach concrete problems in algebra and geometry. No background in algebraic geometry will be assumed.