## Algebra and Number Theory Seminar

Hidden Smoothness of Varieties

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**Abstract:** (No prior knowledge of stacks will be assumed for this talk.) From many perspectives, varieties with quotient singularities behave as if they were smooth. One way to explain this phenomenon is that such varieties are the underlying spaces of smooth stacks. We discuss generalizations of this fact and obtain purely scheme-theoretic applications to invariant theory, Hodge theory, and birational geometry.

Wednesday, September 5, 2012, 3:00 pm Mathematics and Science Center: W306

MATHEMATICS AND COMPUTER SCIENCE EMORY UNIVERSITY