The University of Colorado at Boulder

Department of Mathematics Presents the

Second Annual Fall Convocation Lecture

Professor Ravi Vakil

Stanford University

“The Mathematics of Doodling”

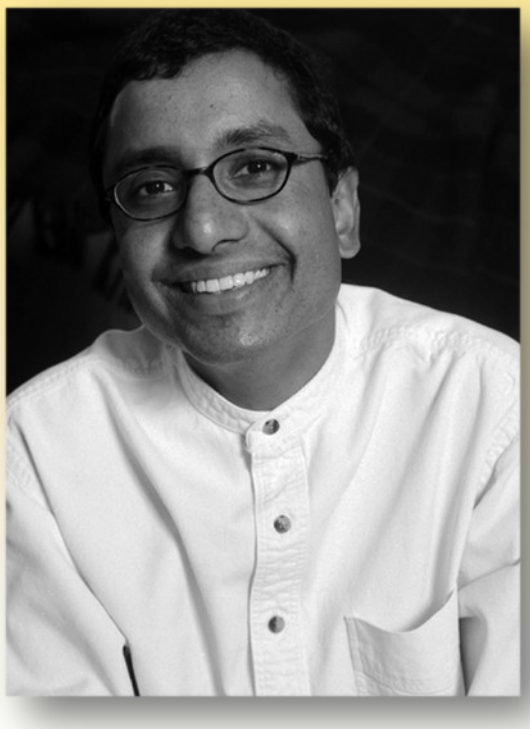
Thursday, September 9, 2010

5:30 pm

MATH 100

(Pizza and refreshments to follow in MATH 175)

Doodling has many mathematical aspects: patterns, shapes, numbers, and more. Not surprisingly, there is often some sophisticated and fun mathematics buried inside common doodles. I’ll begin by doodling, and see where it takes us. It looks like play, but it reflects what mathematics is really about: finding patterns in nature, explaining them, and extending them. By the end, we'll have seen some of the fundamental ideas guiding the development of mathematics over the course of the last century, and continuing work done today.



Ravi Vakil is a Professor of Mathematics and the David Huntington Faculty Scholar at Stanford University. He was born in Toronto, Canada, and studied at the University of Toronto, where he was a four-time winner of the Putnam competition (“Putnam Fellow”). He received his Ph.D. from Harvard in 1997, and taught at Princeton and MIT before moving to Stanford in 2001. He is an algebraic geometer, and his work involves many other parts of mathematics, including topology, string theory, applied mathematics, combinatorics, number theory, and more. His awards include the Alfred P. Sloan Research Fellowship, the National Science Foundation CAREER Award, the American Mathematical Society Centennial Fellowship, and the Presidential Early Career Award for Scientists and Engineers. He is the Robert K. Packard University Fellow in Undergraduate Education, and has won the Dean's Award for Distinguished Teaching. He works extensively with talented younger mathematicians at all levels, from high school (through math circles, camps, and olympiads), through recent Ph.D.'s.