## Michigan Math Club

Collegiate Professorship Inaugural Lecture Thursday at 4pm in Rackham Amphitheatre

## **Counting the Ways**

## Sergey Fomin

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Abstract for 1 Dec. 2011

Enumerative combinatorics, the mathematical theory of counting, is one of the oldest mathematical disciplines. Early examples include the Bell numbers (Murasaki Shikibu, ca. 1000), the Pascal triangle (Jia Xian, ca. 1050), enumeration of permutations (Bhaskara, ca. 1100), and the Fibonacci numbers (Leonardo di Pisa, 1202). The lecture will present a sample of counting problems which arise naturally in various branches of mathematics and its applications, and which have unexpectedly elegant answers.

