## The SUMO Speaker Series for Undergraduates

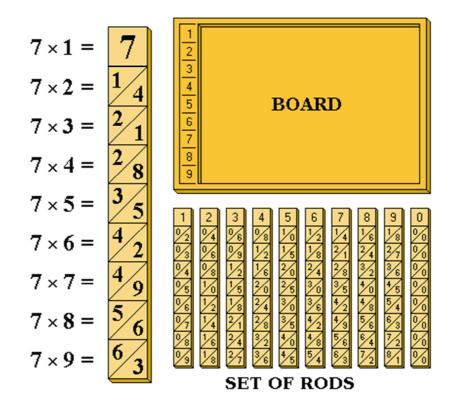
Thursday, January 9th

4:15-5:05, room 380C

(Food Provided)

## The Multiplication Table Problem

## Professor Kannan Soundararajan



## **Abstract:**

Consider the multiplication table obtained by multiplying two numbers up to N. How many distinct numbers are in this table? I'll explain results of Erdös and others on this problem showing that very few numbers up to  $N^2$  appear in the multiplication table. These results are part of the general story of understanding what the factorization of a typical integer looks like.

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