

The SUMO Speaker Series for Undergraduates

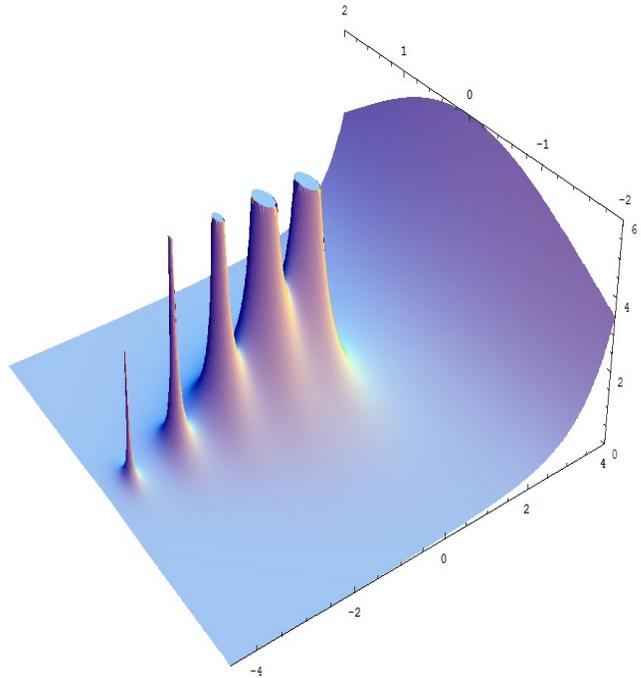
Wednesday, December 3rd
4:30-5:30, room 380C (in the basement)

Extending $n!$

Professor Benedict Gross
Harvard University

ABSTRACT:

One of the early triumphs of the integral calculus was an estimate for the growth of the function F on the positive integers defined by $F(n) = n! = n \cdot (n-1) \cdot (n-2) \dots 3 \cdot 2 \cdot 1$. Euler was able to give a more precise estimate of the growth by defining an extension of this function, from the positive integers to the positive real numbers. I will describe Euler's gamma function, and discuss its values at rational arguments. I will also define an analogous extension of $n!$ to a function on the p-adic integers.



Food from Pizza Chicago

Contact Nathan Pflueger (pflueger@stanford.edu) for more information.