

The SUMO Speaker Series for Undergraduates

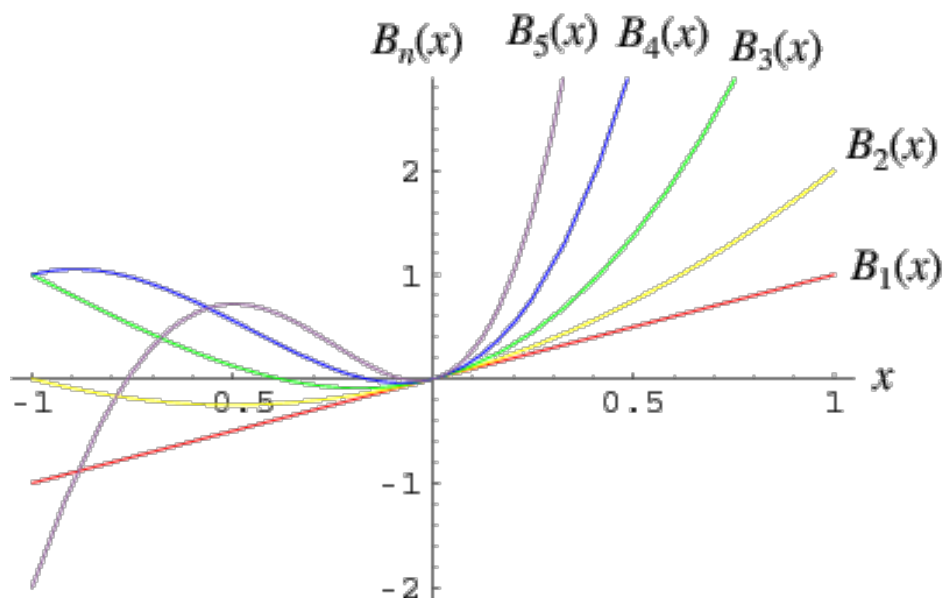
Thursday, September 26th

4:15-5:05, room 380C

(Food Provided)

The integers vs. polynomials over a finite field: Who wins?

Professor Christelle Vincent



ABSTRACT:

We will start by discussing the integers, and some of their most basic properties, such as associativity and commutativity of addition and multiplication, existence of additive and multiplicative inverses, etc. Then we will introduce a new system of numbers (the "clocks" with a prime number of hours) and see that the polynomials with coefficients in these systems of numbers share many characteristics with the integers, but are also in some ways strikingly different from the integers. While we will attempt to give the integers a fair chance, it will be clear that the polynomials we introduce are far superior to the integers, and by the end of the talk we hope that everyone will agree that the polynomials win.

sumo.stanford.edu/speakers