"It is the peculiar beauty of this method, gentlemen, and one which endears it to the really scientific mind, that under no circumstances can it be of the smallest possible utility." – Henry John Stephen Smith (1826-1883)

The Trivial Notions Seminar Proudly Announces

Cartier-Foata Theory

A talk by Reid Barton

Abstract

A "free partially commutative monoid" is the set of words on an alphabet in which specified pairs of letters are declared to commute. Cartier and Foata investigated these monoids in the sixties and found a generating-function formula for the number of words of a given length in such a monoid. We will interpret this formula as an example of a combinatorial reciprocity phenomenon, and give a conceptual proof based on the principle that the natural setting for the "combinatorics of negative objects" is homotopy theory.

Friday, October 13th, 2006 at 2:00 pm Science Center 507