Speaker: Jonathan P. Seldin

Title: AN ALTERNATIVE WAY OF LOOKING AT FUNCTIONS: AN INTRODUCTION TO LAMBDA-CALCULUS AND COMBINATORY LOGIC

Room: A 580
Date: Friday, Jan 9, 2004
Time: 10:00--11:00

Abstract:
Functions are usually thought of as sets of ordered pairs. Lambda-calculus, which was introduced by Alonzo Church in the early 1930s, is a calculus of functions taken as rules. Combinatory logic, which was introduced by Moses Schönfinkel and mainly developed by Haskell B. Curry, is an equivalent formalism. It turns out that either formalism is a prototype for the functional programming languages, such as LISP or ML, and the typed versions of these formalisms are prototypes for the typing discipline in all programming languages.

This talk will be an introduction to both systems along with a discussion of applications to logic and computer science.