

TEMPLE UNIVERSITY MATHEMATICS COLLOQUIUM

Aaron Lauda

University of Southern California

will speak on

An introduction to diagrammatic categorification

ABSTRACT: Categorification seeks to reveal a hidden layer in mathematical structures. Often the resulting structures can be combinatorially complex objects making them difficult to study. One method of overcoming this difficulty, that has proven very successful, is to encode the categorification into a diagrammatic calculus that makes computations simple and intuitive. In this talk I will review some of the original considerations that led to the categorification philosophy. We will examine how the diagrammatic perspective has helped to produce new categorifications having profound applications to algebra, representation theory, and low-dimensional topology.

MONDAY, DECEMBER 2, 2013

LECTURE AT 4:00 PM

COFFEE, TEA, AND REFRESHMENTS FROM 3:40 PM

ROOM 617, WACHMAN HALL

DEPARTMENT OF MATHEMATICS