Job Talk

The O-Z Conjecture and Ono's Fundamental Problem Number 1

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Abstract: The study of mock modular forms and mock theta functions is one of the hottest areas in number theory with important works by Bringmann, Ono, Zagier, and Zwegers, among many others. The theory, which is still in its infancy, has many applications: additive number theory, elliptic curves, mathematical physics, representation theory, etc. Despite this high level of activity, many fundamental problems remain open. The first of Ono's "Fundamental Problems" is: Find a direct method for relating the coefficients of Zagier shadows and mock modular forms. Here I will announce a solution to this problem, and along the way will announce a proof of the O-Z Conjecture.

Tuesday, May 18, 2010, 1:00 pm Mathematics and Science Center: W303

Refreshments will be served at 12:30 in the Math/CS Break Room.

MATHEMATICS AND COMPUTER SCIENCE EMORY UNIVERSITY