## Algebra and number theory Seminar

Eta-quotients and theta functions

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**Abstract:** The Jacobi Triple Product Identity gives a closed form for many infinite product generating functions that arise naturally in combinatorics and number theory. Of particular interest is its application to Dedekind's eta-function  $\eta(z)$ , defined via an infinite product, giving it as a certain kind of infinite sum known as a theta function. Using the theory of modular forms, we classify all eta-quotients that are theta functions.

Tuesday, November 9, 2010, 3:00 pm Mathematics and Science Center: E408

MATHEMATICS AND COMPUTER SCIENCE EMORY UNIVERSITY