Arithmetic of the Fourier Coefficients of Modular Forms

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007 Kemeny Hall, 4:00 pm
(Tea 3:30 pm 300 Kemeny Hall)

Abstract

In the last decade, the theory of modular forms has provided an important framework in which to study questions in arithmetic number theory. Modular forms act as generating functions for many partition functions, divisor functions, and other combinatorial functions. We will review the role modular forms have played in establishing congruence properties for such functions, and give general results about congruences for the coefficients of weakly holomorphic modular forms. If time permits, we will also discuss new work involving harmonic Maass forms.

This talk should be accessible to graduate students. 1200419148