

ALGEBRAIC AND P-ADIC ASPECTS OF L-FUNCTIONS, WITH A VIEW TOWARD SPIN L-FUNCTIONS FOR GSp_6

ELLEN EISCHEN

I will discuss recent developments and ongoing work for algebraic and p-adic aspects of L-functions. Interest in p-adic properties of values of L-functions originated with Kummer's study of congruences between values of the Riemann zeta function at negative odd integers, as part of his attempt to understand class numbers of cyclotomic extensions. After presenting an approach to studying analogous congruences for more general classes of L-functions, I will conclude by introducing ongoing joint work of G. Rosso, S. Shah, and myself (concerning Spin L-functions for GSp_6). I will explain how this work fits into the context of earlier developments, while also indicating where new technical challenges arise. All who are curious about this topic are welcome at this talk, even without prior experience with Spin L-functions.