

Speaker: Matthew Young

Title: Second moment of the GL_3 standard L-function on the critical line

Abstract: The second and fourth moments of the Riemann zeta function have been known for about a century, but the sixth moment remains elusive. The sixth moment of zeta can be thought of as the second moment of a GL_3 Eisenstein series, and it is natural to consider variants of the problem where the Eisenstein series is replaced by a cusp form. I will discuss recent work with Agniva Dasgupta and Wing Hong Leung where we obtain a nontrivial bound on this second moment. I will also discuss some applications, including an improvement on the Rankin-Selberg problem.