1046-11-1778   **Paul Jenkins*** (`jenkins@math.byu.edu`), Department of Mathematics, Brigham Young University, Provo, UT 84602. *On singular values of Maass forms.*

In an influential paper, Zagier proved that generating functions for traces of singular moduli associated to polynomials in $j(\tau)$ are in fact modular forms of half integral weight on $\Gamma_0(4)$. Bringmann and Ono generalized his results to higher weights, showing that the traces of certain Maass forms appear as coefficients of Poincaré series of half integral weight. In this talk we discuss recent work on singular values of Maass forms. (Received September 16, 2008)