Meeting: 1003, Atlanta, Georgia, AMS CP 1, AMS Contributed Paper Session

1003-11-1462 Nathan C Ryan\* (nathan.c.ryan@dartmouth.edu), Department of Mathematics, 6188 Bradley Hall, Hanover, NH 03755. On Computing Satake p-parameters for Siegel Modular Forms. Preliminary report.

Hecke eigenvalues of elliptic modular forms often encode a wealth of arithmetic data. The Satake p-parameters of a Siegel modular form play a role analogous to the one played by Hecke eigenvalues in the characterization of elliptic modular forms. In this talk we present an algorithm by which we can compute the Satake p-parameters of a Siegel modular form F if we are given the Hecke eigenvalues of F with respect to the generators of the local Hecke algebra. We provide some examples. (Received October 05, 2004)