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**Nathan C Ryan\***, Department of Mathematics, Lewisburg, PA 17837, and **Lauren Grainer, Kevin McGoldrick, Sharon Anne Garthwaite, Cris Poor, David W Farmer, David S Yuen** and **Ralf Schmidt**. *Experiments with Siegel Modular Forms*.

There are a number of conjectures (and theorems) that hold for modular forms on  $SL(2, \mathbb{Z})$  whose description is the result of large amounts of computation. In this talk we will discuss recent computational work that has been done for analogous conjectures for modular forms on  $Sp(2n, \mathbb{Z})$ . The conjectures which have been generalized include an analogue of Maeda's conjecture, the Sato-Tate conjecture, and the Riemann Hypothesis for L-functions attached to modular forms. Additionally, we will make note of two liftings of classical modular forms to Siegel modular forms on  $Sp(8, \mathbb{Z})$ . (Received August 24, 2008)