984-33-251   **Laura J. Stevens*** (`lstevens@email.unc.edu`), Math Dept CB 3250, UNC Chapel Hill, Chapel Hill, NC 27599-3250. *Modular transformations of the elliptic hypergeometric functions, Macdonald polynomials, and the shift operator.*

We consider the space of elliptic hypergeometric functions of the sl_2 type associated with elliptic curves with one marked point. This space represents conformal blocks in the sl_2 Wess-Zumino-Witten model of Conformal Field Theory. The modular group acts on this space. We give formulas for the action in terms of values at roots of unity of Macdonald polynomials of type A_1. (Received January 22, 2003)