

1116-11-1174      **Heidi E Goodson\*** (goods052@umn.edu). *Hypergeometric Point Counts for Dwork K3-Surfaces.*

In 1995, Koike showed that the trace of Frobenius for elliptic curves in the Legendre family can be expressed in terms of Greene's finite field hypergeometric series. Further connections between hypergeometric series and algebraic varieties have been studied since then, though the focus has largely been on elliptic curves and Calabi-Yau threefolds. We extend this work by showing that the number of points on Dwork K3-Surfaces over finite fields can be expressed in terms of Greene's finite field hypergeometric series. (Received September 17, 2015)