

1135-11-1213 **Heidi Goodson*** (hgoodson@haverford.edu). *Hypergeometric Properties of Genus 3 Generalized Legendre Curves.*

Inspired by a result of Manin, we study the relationship between certain period integrals and the trace of Frobenius of genus 3 generalized Legendre curves. We show that both of these properties can be computed in terms of “matching” classical and finite field hypergeometric functions, a phenomenon that has also been observed in elliptic curves and many higher dimensional varieties. (Received September 20, 2017)