

1116-14-2382 **Ursula Whitcher*** (whitchua@uwec.edu). *Mirror symmetry and K3 surface zeta functions.*

Mirror symmetry predicts surprising geometric correspondences between distinct families of algebraic varieties. In some cases, these correspondences have arithmetic consequences. We use Berglund-Huebsch-Krawitz mirror symmetry to make and test predictions about the zeta functions of certain K3 surfaces described by quartic polynomials, generalizing the notion of isogeny for elliptic curves. (Received September 22, 2015)