1093-57-227 Michael Brad Henry* (mbhenry@siena.edu) and Dan Rutherford (drruther@uark.edu).

Ruling polynomials and augmentations of Legendrian links.

For any Legendrian link L in the standard contact structure on \mathbb{R}^3 we define invariants $Aug_m(L,q)$ as normalized counts of augmentations from the Legendrian contact homology DGA of L into a finite field of order q where the parameter m is a divisor of twice the rotation number of L. Generalizing a result of Ng and Sabloff for the case q=2, we show that the augmentation numbers $Aug_m(L,q)$ are determined by specializing the m-graded ruling polynomial, $R_L^m(z)$, at $z=q^{1/2}-q^{-1/2}$. As a corollary, we deduce that the ruling polynomial invariants are determined by the Legendrian contact homology DGA. (Received August 15, 2013)