Title: Unlikely intersections for algebraic curves in positive characteristic.

Abstract: In the last decade there has been much study of what happens when an algebraic curve in n-space is intersected with two multiplicative relations

$$x_1^{a_1} \cdots x_n^{a_n} \;=\; x_1^{b_1} \cdots x_n^{b_n} \;=\; 1 \qquad\qquad (\times)$$

for $(a_1, \ldots, a_n), (b_1, \ldots, b_n)$ linearly independent in $\mathbf{Z}^n$. Usually the intersection with the union of all $(\times)$ is at most finite, at least in zero characteristic. This often becomes false in positive characteristic, and we will give some examples, conjectures, and a substitute result for $n = 3$. If there is time, we may also mention recent work with Dale Brownawell on additive relations $(+)$ in the contexts of Frobenius Modules and Carlitz Modules.