

EVENTUALLY MINIMAL CURVES

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ABSTRACT. A curve defined over a finite field is maximal or minimal according to whether the number of rational points attains the upper or the lower bound in Hasse-Weil's theorem, respectively. In the study of maximal curves a fundamental role is played by an invariant linear system introduced by Rück and Stichtenoth in [**R-St**]. In this paper we define an analogous invariant system for minimal curves, and we compute its orders and its Weierstrass points. In the last section we treat the case of curves having genus three in characteristic two.