

---

**RICARDO TOLEDANO**, Universidad Nacional del Litoral

*S*-minimal value set polynomials and towers of Garcia, Stichtenoth and Thomas type

An interesting family of tamely ramified recursive towers of function fields over finite fields was defined by Garcia, Stichtenoth and Thomas in 1997. They gave sufficient conditions to have asymptotically good towers in this family and all the examples were given over non prime fields. Later in 2001 H. Lenstra found a polynomial identity which explained why their conditions failed in the case of prime fields. In this talk we will show that a modification of Lenstra's identity will allow us to relate the equations defining the towers in this family with the theory of minimal value set polynomials.