

1077-11-1192      **Meghan M De Witt\*** (mdewitt1@uco.edu), Edmond, OK. *The Inverse Galois Problem and Minimal Ramification over Function Fields.*

The Inverse Galois Problem is concerned with finding an extension of a given field  $K$  having a given Galois group. Here we consider the particular case where the base field is  $K = \mathbb{F}_p(t)$ . We give a conjectural formula for the minimal number of primes, both finite and infinite, ramified in  $G$ -extensions of  $K$ , and give theoretical and computational proofs for many cases of this conjecture. (Received September 17, 2011)