

1086-12-1895

Meghan M De Witt* (dewitt@math.byu.edu), Provo, UT. *Minimal ramification and the Inverse Galois Problem over function fields.*

The Inverse Galois Problem is concerned with finding an extension of a field K with given Galois group. Here we consider the case where the base field is $K = \mathbb{F}_p(t)$ and give a conjectural formula for the minimal number of ramified primes in a G -extension of K . We provide a proof of this conjecture using embedding theory for all nilpotent groups. (Received September 24, 2012)