

1109-11-78

Abel Castillo* (acasti8@uic.edu) and **Rainer Dietmann**. *An effective version of Hilbert's Irreducibility Theorem.*

Let $f(X, t_1, \dots, t_k)$ be a polynomial in X with coefficients in $\mathbb{Z}[t_1, \dots, t_k]$. Hilbert's Irreducibility Theorem tells us that for "almost all" integer specializations of (t_1, \dots, t_k) , the resulting polynomial in X has the "largest possible" Galois group over \mathbb{Q} . Effective versions of Hilbert's Irreducibility Theorem typically give upper bounds for the number of integer specializations of bounded height that fail to have the largest possible Galois group over \mathbb{Q} . In this talk we will discuss an upper bound for specializations whose Galois group is a fixed subgroup H , where the bound becomes stricter for smaller choices of H . (Received January 22, 2015)