

1147-11-82

Gordan Savin* (savin@math.utah.edu) and **Kay Magaard**. *Computing finite Galois groups arising from automorphic forms.*

We study modulo p reduction of compatible systems of p -adic representations of the absolute Galois group of \mathbb{Q} , arising from an algebraic automorphic representation. In particular, we prove that there is a field extension of \mathbb{Q} with the Galois group $G_2(p)$, ramified at 5 and p only, for a set of primes p of density one. (Received December 03, 2018)