

1037-11-289

**Marius M Somodi\*** ([somodi@uni.edu](mailto:somodi@uni.edu)), Department of Mathematics, University of Northern Iowa, Cedar Falls, IA 50614. *Wild sets of Hilbert symbol self-equivalences*. Preliminary report.

A *Hilbert symbol self-equivalence* of a number field  $K$  is a pair of mappings  $(t, T)$ , where  $t$  is an automorphism of the square class group of  $K$  and  $T$  is a bijection from the set of places of  $K$  to itself, that preserves the Hilbert symbols. A finite place  $P$  of  $K$  is called *tame* with respect to  $(t, T)$  if  $t$  maps square classes of units at  $P$  to square classes of units at  $T(P)$  and square classes of primes at  $P$  to square classes of primes at  $T(P)$ . Finite places that are not tame are called *wild*. The set of all the places of  $K$  that are wild with respect to  $(t, T)$  is called the *wild set* of  $(t, T)$ . This talk will focus on the structure of the finite wild sets of Hilbert symbol self-equivalences. (Received February 04, 2008)