

1052-12-75

**Jan Minac\*** ([minac@uwo.ca](mailto:minac@uwo.ca)), University of Western Ontario, Dept. of Math., Middlesex College, London, Ontario N6A 5B7, Canada. *Tiny, spectacular Galois jewels in the midst of mysterious giants*. Preliminary report.

Abstract:

Absolute Galois groups of fields are mysterious, grotesquely large, serious and intimidating giants. However if you look carefully you will see on their giant fingers, tiny, spectacular Galois groups of exponents at most  $p$  times  $p$  (for each prime number  $p$ ) and of nilpotence index at most 2. Surprisingly these gems reveal a lot about their owners and their corresponding base fields.

This is a report on my joint work with Sunil Chebolu and Ido Efrat. (Received August 19, 2009)