## 1145-11-1664 Robert J Lemke Oliver and Jiuya Wang<sup>\*</sup> (jiuya.wang@duke.edu), 120 Science, 117 Physics Building, Durham, NC 27708, and Melanie Matchett Wood. Inductive Methods for Counting Number Fields.

We propose a general framework to inductively prove new results for counting number fields. By using this method, we prove the asymptotic distribution for extensions with Galois groups in the form of  $T \wr B$  where  $T = S_3$  or abelian groups and B is an arbitrary group with the associated counting function not growing too fast. The key ingredient is a uniform estimate on the number of relative extensions with dependency on the base field. This is a joint work with Robert J.Lemke Oliver and Melanie Matchett Wood. (Received September 23, 2018)