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of Massachusetts, Amherst. *Non-abelian generalizations of the Cohen-Lenstra heuristics.*

Formulated in the 1980s, the Cohen-Lenstra heuristics make precise predictions about the distribution of class groups in various families of number fields. While still largely unproven, there is much numerical evidence and a number of extensions have been made beyond the original setting. In order to formulate a non-abelian generalization, we replace the p-part of the class group (for p an odd prime) with the Galois group of the maximal unramified p-extension of the base field. In this talk, we describe our conjectures regarding the distribution of such Galois groups for both real and imaginary quadratic fields along with some more recent developments. (Received September 25, 2018)