Speaker: Melanie Wood

Title: Nonabelian Cohen-Lenstra distributions

Abstract: We discuss conjectures for the distribution of Galois groups of the maximal unramified extension of quadratic fields and results towards these conjectures in the function field case (as the size of the finite field goes to infinity). We will give a construction of a random pro-odd group whose moments match those we see in the function field results, as a candidate random group for the distribution of the maximal pro-odd unramified extension of quadratic fields. Venturing into the even part, we will give a conjecture for the average number of unramified G-extensions of an imaginary (or real) quadratic field for any finite group G, motivated by further function field results. The talk with include joint work with Boston and with Y. Liu.