

BEYOND THE DISTRIBUTIONS OF CLASS GROUPS

Online seminar

Speaker: Yuan Liu
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Time: Mon, Jan. 10th, 10:00-11:00

Zoom Meeting ID: 950 8814 8981 Password: 414504

Abstract: We will first review several heuristics on the distribution of Galois groups of unramified extensions of global fields, which includes the Cohen—Lenstra Heuristics regarding the class groups of quadratic number fields and the Friedman — Washington Heuristics regarding the Jacobians of hyperelliptic curves. We will then discuss how these heuristics relate to reasonable random group models, and discuss how the function field case is less difficult. Finally, we will explain new conjectures on the distributions of Galois groups of the maximal unramified extensions of Galois number fields or function fields for a fixed Galois group.