

Speaker: Akshay Venkatesh

Title: The Cohen-Lenstra heuristics and related problems

Abstract: I will first explain the proof of a version of the Cohen-Lenstra heuristics over function fields (joint with Ellenberg and Westerland; it's a strengthening of the previous result in arxiv: 0912.0325). I will then speculate about how these ideas might be used to model questions about the Galois group over number fields (e.g. how likely is a number field to have unramified S_n extensions?) In particular I'll discuss how the Schur multiplier of the group affects the story.