

1106-14-1906

Jordan S Ellenberg* (ellenber@math.wisc.edu), University of Wisconsin, Department of Mathematics, 480 Lincoln Drive, Madison, WI 53705. *Random Selmer groups over function fields.*

I will discuss some questions around heuristics for Selmer groups of random elliptic curves proposed by Poonen and Rains and refined by Bhargava, Kane, Lenstra, Poonen, and Rains. In particular, I will discuss some interesting geometry questions (especially monodromy questions) that arise when these questions are considered over the field $\mathbf{F}_q(t)$. I also hope to talk about situations where the presence of rational torsion makes Selmer groups deviate from Poonen-Rains behavior, as in the work of Klagsbrun and Lemke Oliver. Work discussed is joint with Chris Hall, Zev Klagsbrun, and maybe some other people, depending on what happens between now and January. (Received September 15, 2014)