1000-11-167 **Douglas Ulmer*** (`ulmer@math.arizona.edu`), Department of Mathematics, University of Arizona, Tucson, AZ 85721. *Ranks of quadratic twists of elliptic curves and random matrix theory.* Preliminary report.

I will discuss some conjectures and results inspired by random matrix theory on ranks of quadratic twists of an elliptic curve over a function field. (Received August 23, 2004)