1046-11-288 Lisa A Berger* (lbrgr@math.sunysb.edu), Mathematics Departement, Stony Brook University, Stony Brook, NY 11790-3651. Elliptic curves of large rank in towers of function fields.

In this talk we will discuss a recent construction of a one-parameter family of elliptic curves over $\mathbb{F}_q(t^{1/d})$ whose members obtain arbitrarily large rank as $d \to \infty$. We'll begin with some background material on elliptic curves and their ranks, discuss the interesting geometry in the proof, and see some examples. The talk is accessible to a general matheamtical audience. (Received August 25, 2008)