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David Zureick-Brown* (dzb@mathcs.emory.edu) and **Eric Katz**. *Rational points on curves and chip firing.*

Let X be a curve over \mathbb{Q} with genus $g \geq 2$, $p > 2r$ a prime, J the Jacobian of X , $r = \text{rank } J(\mathbb{Q})$, and \mathcal{X} a regular proper model of X at p . Suppose $r < g$. We prove that $\#X(\mathbb{Q}) \leq \#\mathcal{X}(\mathbb{F}_p) + 2r$, extending the refined version of the Chabauty-Coleman bound to the case of bad reduction.

In this talk I'll review the setup of Chabauty-Coleman and explain a new technical insight from tropical geometry which generalizes the classical rank of a divisor on a curve to a notion better suited for singular curves and which satisfies Clifford's theorem. (Received September 15, 2013)