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The average number of elliptic curves with a fixed number of points

Let E be an elliptic curve defined over \mathbb{Q} . If p is a prime of good reduction then we define the group of points on the reduced elliptic curve over \mathbb{F}_p as $E_p(\mathbb{F}_p)$. Let N be a fixed positive integer. David and Smith defined the function $M_E(N) := \#\{p \mid \#E_p(\mathbb{F}_p) = N\}$, and considered this function on average over a family of elliptic curves. They proved an asymptotic result with bounds on the size of the coefficients of the elliptic curves. In this talk we show how their result can be improved to hold for a larger range of elliptic curves.