Henri Darmon\* (darmon@math.mcgill.ca), McGill University Mathematics Department, 805 Sherbrooke Street West, Montreal, QC H3A-2K6, Canada. Ranks of elliptic curves over towers of Kummer extensions. Preliminary report.

I will discuss the growth of the rank of Mordell-Weil groups of elliptic curves over fields obtained by adjoining to the rationals a primitive  $p^n$ th root of 1 and of another element, q. This is a report on work in progress with Ye Tian. (Received January 29, 2006)