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Alina Carmen Cojocaru* (cojocaru@math.princeton.edu), 851 S. Morgan Street, Science Engineering Offices, Chicago, IL 60607-7045, and **Antal Balog** and **Chantal David**. *Average twin prime conjecture for elliptic curves.*

Let E/Q be an elliptic curve defined over the field of rational numbers. Let p be a prime of good reduction for E , and let E_p be the reduction of E modulo p . In 1988, N. Koblitz formulated a conjecture about the number of primes $p < x$ for which the order of the group of points of E_p is prime. This may be viewed as an elliptic curve analogue of the twin prime conjecture. We will show that Koblitz's conjecture is true on average over a (sufficiently large) family of elliptic curves E/Q . (Received September 26, 2006)