Algebra Colloquium

Twin primes for elliptic curves

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Abstract: The classical twin prime conjecture states that there are infinitely many primes p such that p + 2 is also a prime. Though still unproven, the twin prime conjecture has generated many important developments in the theory of numbers. Motivated by elliptic curve cryptography, in 1988 Neal Koblitz formulated an analogue of this conjecture in the context of elliptic curves. The talk will focus on partial results concerning Koblitz's Conjecture. In particular, it will focus on a recent result of A. Balog (Budapest), C. David (Montreal) and the speaker stating that, for "most" elliptic curves over Q, Koblitz's Conjecture is indeed true.

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Mathematics and Computer Science
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