1086-11-1664 **Jeffrey D Achter*** (achter@math.colostate.edu), Department of Mathematics, Colorado State University, Fort Collins, CO 80523-1874, and **Clifton Cunningham**. *L-packets and abelian varieties.* Preliminary report.

Let $E/\mathbb{Q}$ be an elliptic curve without complex multiplication. A famous theorem of Elkies states that E has infinitely many primes of supersingular reduction; it turns out that this is equivalent to the infinitude of a certain L-packet of automorphic representations of SL_2. I will explain this equivalence, and discuss the analogue for abelian varieties of higher dimension. (Received September 23, 2012)