1056-11-677 **J Brian Conrey*** (conrey@aimath.org), American Insttute of Mathematics, 360 Portage Ave., Palo Alto, CA 94306. *Critical zeros of Dirichlet L-functions.* Preliminary report.

It is known that at least 40.88% of the zeros of the Riemann zeta-function are on the critical line.

In joint work with Iwaniec and Soundararajan we prove a lower bound for zeros of Dirichlet L-functions on the critical line. Specifically, let Q be a large parameter. Consider all of the primitive Dirichlet characters χ modulo q where $q \le Q$, all of the associated L-functions $L(s,\chi)$ and all of the zeros of all of these $L(s,\chi)$ in the critical strip up to height $\log Q$. We show that at least x percent of the collection of all of these zeros are on the critical line, i.e. have real parts equal to $1/2$, where x is a number that will be revealed during the talk. (Hint: $x > 40.88$.) (Received September 15, 2009)