1106-60-2907   **Umit Islak***, 1267 Fifield Place, St Paul, MN , and **Christian Houdre**. *A Central Limit*
Theorem for the Length of the Longest Common Subsequence in Random Words.

Let $(X_k)_{k\geq 1}$ and $(Y_k)_{k\geq 1}$ be two independent sequences of independent identically distributed random variables having the same law and taking their values in a finite alphabet. Let LC_n be the length of longest common subsequences in the two random words $X_1 \cdots X_n$ and $Y_1 \cdots Y_n$. Under assumptions on the distribution of X_1, LC_n is shown to satisfy a central limit theorem. This is in contrast to the limiting distribution of the length of longest common subsequences in two independent uniform random permutations of $\{1, \ldots, n\}$, which is shown to be the Tracy-Widom distribution. (Received September 17, 2014)