1093-57-132   **Tarik Aougab*** (`tarik.aougab@yale.edu`), Yale University Mathematics Department, 10 Hillhouse Avenue, New Haven, CT 06511. *Optimal intersection numbers in the curve graph.*

Let $S_{g,p}$ be an orientable surface with $W(S) = 3g + p - 4 > 0$. We determine a lower bound, in terms of $W(S)$, on the intersection number of any pair of curves on S which are distance k in the corresponding curve graph, and we present an infinite class of examples which demonstrates that this bound is asymptotically sharp in some sense. We use this to show that curve graphs are uniformly hyperbolic, and train track splitting sequences project to R-quasigeodesics in the curve graph of any essential subsurface, where $R \in O(W(S)^2)$.

As an application, we show how to more effectively identify the pseudo-Anosov maps which are generic, in the sense that the attracting lamination intersects each meridian. (Received August 08, 2013)

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