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**William W Menasco\*** (menasco@buffalo.edu) and **Dan Margalit**. *Distance and intersection number in the curve complex*. Preliminary report.

Let  $S_g$  be a closed oriented surface of genus  $g \geq 2$  and  $\mathcal{C}^1(S_g)$  be its curve complex—vertices are homotopy classes of essential simple closed curves with two vertices sharing an edge if they have disjoint representatives. It is known that  $\mathcal{C}^1(S_g)$  is path connected, and the distance,  $d(\alpha, \beta)$ , between two vertices  $\alpha, \beta \in \mathcal{C}^1(S)$  is just the minimal count of the number of edges in an edge-path between  $\alpha$  and  $\beta$ . One can also consider,  $i(\alpha, \beta)$ , the minimal intersection between curve representatives of  $\alpha$  and  $\beta$ . This talk will discuss the interplay between the growth of  $i(\alpha, \beta)$  and  $d(\alpha, \beta)$  grows. This is joint work with Dan Margalit and, additionally, features joint work with Joan Birman and Dan Margalit. (Received January 10, 2019)