

## Distances in the homology curve complex

In this talk a curve complex  $\mathcal{HC}(S)$  closely related to the “Cyclic Cycle Complex” (Bestvina-Bux-Margalit) and the “Complex of Cycles” (Hatcher) is defined for an orientable surface of genus  $g \geq 2$ . The main result is a simple algorithm for calculating distances and constructing quasi-geodesics in  $\mathcal{HC}(S)$ . It is shown that distances in  $\mathcal{HC}(S)$  behave quite differently from distances in other curve complexes with regards to subsurface projections.