

## **scl in mcg**

*Mladen Bestvina*  
*University of Utah*

I will present a joint work with Ken Bromberg and Koji Fujiwara. Given an element  $f$  of the mapping class group of a compact surface, we can read off from its Nielsen-Thurston decomposition whether or not  $\text{scl}(f) > 0$ , and there is a similar algorithm for subgroups of  $\text{mcg}$ . For example, there is a finite index subgroup in which  $\text{scl}$  is positive on all nontrivial elements. The argument uses our previous work where we construct many actions of groups on quasi-trees.