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Title: Groups acting on quasi-trees

Abstract: If G is the fundamental group of a closed non-positively curved rank 1 manifold, then G admits many actions on quasi-trees (spaces quasi-isometric to trees). In fact, groups like mapping class groups and $\text{Out}(F_n)$, which are not non-positively curved but exhibit rank 1 behavior, also admit actions on quasi-trees. I will present a construction of these actions (joint work with Bromberg and Fujiwara). If time permits, I will describe an application, that mapping class groups have finite asymptotic dimension.