EDUARDO MARTINEZ-PEDROZA, Memorial University

On Subgroups of Non-positively Curved Groups

If $\mathcal{C}$ is a class of locally finite complexes closed under taking full subcomplexes and covers and $\mathcal{G}$ is the class of groups admitting proper and cocompact actions on one-connected complexes in $\mathcal{C}$, then $\mathcal{G}$ is closed under taking finitely presented subgroups. As a consequence the following classes of groups are closed under taking finitely presented subgroups: groups acting geometrically on regular $CAT(0)$ simplicial complex of dimension 3, $k$-systolic groups for $k \geq 6$ (extending a result of D. Wise), and groups acting geometrically on 2-dimensional negatively curved complexes (extending a result of S. Gersten). This is joint work with Richard G. Hanlon.