

Geometric Group Theory/Théorie géométrique des groupes

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• SHORT TALKS •

Right-angled mock reflection groups

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Abstract

We consider groups that act on CAT(0) cube complexes such that the action is simply-transitive on the vertex set and all edge stabilizers are \mathbb{Z}_2 . These groups include right-angled Coxeter groups, but also include (on passing to a finite index subgroup) fundamental groups of certain manifolds coming from standard constructions in algebraic geometry. I will describe a combinatorial characterization of these groups analogous to the standard presentation for Coxeter groups.