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The action of groups on hyperbolic spaces. (English) Zbl 0845.53032
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We investigate the action of a group on a hyperbolic space in the sense of Gromov, where the subgroups are geometrically finite. Several well-known results about hyperbolic and free groups follow as special cases. The proofs are based on the induced action of groups on the boundary of hyperbolic spaces.

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MSC:

53C23 Global geometric and topological methods (à la Gromov); differential geometric analysis on metric spaces
20F65 Geometric group theory

Cited in **1** Review
Cited in **2** Documents

Keywords:

hyperbolic groups; Kleinian groups; quasi-convex; quasi-isometry; geometrically finite; group action; hyperbolic space

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References:

- [1] Coornaert, M.; Delzant, T.; Papadopoulos, A., Notes Sur les Groupes Hyperboliques de Gromov, (Lecture Notes in Math., 1441 (1990), Springer-Verlag: Springer-Verlag Berlin) · [Zbl 0727.20018](#)
- [2] Gersten, S. M.; Short, H. B., Rational subgroups of Biautomatic Groups, Ann. of Math., 134, 125-158 (1991) · [Zbl 0744.20035](#)
- [3] (Ghys, E.; Haefliger, E.; Verjovsky, A., Group Theory from a Geometrical Viewpoint (1991), World Scientific: World Scientific Singapore) · [Zbl 0809.00017](#)
- [4] (Ghys, E.; de la Harpe, P., Sur les Groupes Hyperboliques d'apres Mikhael Gromov. Sur les Groupes Hyperboliques d'apres Mikhael Gromov, Progress in Math. Series, 83 (1990), Birkhauser) · [Zbl 0731.20025](#)
- [5] Greenberg, L., Discrete groups of Motions, Canadian J. Math., 12, 415-426 (1960) · [Zbl 0096.02102](#)
- [6] Gromov, M., Hyperbolic manifolds, groups and action, (Riemann Surfaces and Related Topics. Riemann Surfaces and Related Topics, Proc. Conf. Stony Brook, 1978 (1980), Princeton Univ), 183-213 · [Zbl 0467.53035](#)
- [7] Gromov, M., Group of polynomial growth and expanding map, Inst. Hautes Études Sci. Publ. Math., 53, 53-73 (1981)
- [8] Gromov, M., Hyperbolic groups, (Gersten, S. M., Essays in Group Theory. Essays in Group Theory, MSRI Series, 8 (1987), Springer-Verlag), 75-263 · [Zbl 0634.20015](#)
- [9] Magnus, W.; Karrass, A.; Solitar, D., Combinatorial Group Theory (1976), Dover · [Zbl 0362.20023](#)
- [10] Maskit, B., Kleinian Groups (1988), Springer-Verlag · [Zbl 0627.30039](#)
- [11] A. Ranjbar-Motlagh, Short proofs of some results on hyperbolic groups, Preprint.; A. Ranjbar-Motlagh, Short proofs of some results on hyperbolic groups, Preprint. · [Zbl 0845.53032](#)
- [12] Susskind, P., Kleinian groups with intersection limit sets, J. d'Analyse Math., 52, 26-38 (1989) · [Zbl 0677.30028](#)
- [13] Susskind, P.; Swarup, G. A., Limit sets of geometrically finite hyperbolic groups, Amer. J. Math., 114, 233-250 (1992) · [Zbl 0791.30039](#)
- [14] Stallings, J. R., Topology of finite graphs, Invent. Math., 71, 551-565 (1983) · [Zbl 0521.20013](#)

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