

**References**

- [Ab] W.Abiloff, *The real analytic theory of Teichmüller space* : Lecture Notes in Mathematics No. 820, Springer (1980).
- [Ali] E.Alibegovic, *A combination theorem for relatively hyperbolic groups* : Bull. London Math. Soc. **37** (2005) 459–466.
- [Alo] J.M.Alonso, *Inégalités isopérimétriques et quasi-isométries* : C. R. Acad. Sci. Paris Sér. I Math. **311** (1990) 761–764.
- [An] J.W.Anderson, *Hyperbolic geometry* : Springer Undergraduate Mathematics Series (1999).
- [Ar] M.A.Armstrong, *Basic topology* : McGraw Hill (1979).
- [Bea] A.F.Beardon, *The geometry of discrete groups* : Graduate Texts in Mathematics No. 91, Springer (1983).
- [Bes1] M.Bestvina, *Degenerations of the hyperbolic space* : Duke Math. J. **56** (1988) 143–161.
- [Bes2] M.Bestvina, *R-trees in topology, geometry and group theory* : in “Handbook of geometric topology” (eds. R.J.Daverman, R.B.Sher) North-Holland (2002) 55-91.
- [Bes3] M.Bestvina, *Questions in geometric group theory* : Problem list, Salt Lake City (2000), updated 2004.
- [BesF] M.Bestvina, M.Feighn, *Stable actions of groups on real trees* : Invent. Math. **121** (1995) 287–321.
- [BesM] M.Bestvina, G.Mess, *The boundary of negatively curved groups* : J. Amer. Math. Soc. **4** (1991) 469–481.
- [Bow1] B.H.Bowditch, *Notes on Gromov’s hyperbolicity criterion for path-metric spaces* : in “Group theory from a geometrical viewpoint” (ed. E.Ghys, A.Haefliger, A.Verjovsky), World Scientific (1991) 64–167.
- [Bow2] B.H.Bowditch, *A short proof that a subquadratic isoperimetric inequality implies a linear one* : Michigan Math. J. **42** (1995) 103–107.
- [Bow3] B.H.Bowditch, *Cut points and canonical splittings of hyperbolic groups* : Acta Math. **180** (1998) 145–186.

- [Bow4] B.H.Bowditch, *A topological characterisation of hyperbolic groups* : J. Amer. Math. Soc. **11** (1998) 643–667.
- [Bow5] B.H.Bowditch. *Planar groups and the Seifert conjecture* : J. reine angew. Math. **576** (2004) 11–62.
- [Bow6] B.H.Bowditch, *Intersection numbers and the hyperbolicity of the curve complex* : to appear in J. reine angew. Math.
- [Bow7] B.H.Bowditch, *Hyperbolic 3-manifolds and the geometry of the curve complex* : in “European Congress of Mathematics, Stockholm 2004” (ed. A.Laptev) European Mathematical Society (2005) 103–115.
- [Bow8] B.H.Bowditch, *Relatively hyperbolic groups* : preprint, Southampton (1999).
- [BowM] B.H.Bowditch, G.Mess, *A 4-dimensional Kleinian group* : Trans. Amer. Math. Soc. **344** (1994) 391–405.
- [BraB] N.Brady, M.R.Bridson, *There is only one gap in the isoperimetric spectrum* : Geom. Funct. Anal. **10** (2000) 1053–1070.
- [Bri] M.R.Bridson, *Fractional isoperimetric inequalities and subgroup distortion* : J. Amer. Math. Soc. **12** (1999) 1103–1118.
- [BriH] M.R.Bridson, A.Haefliger, *Metric spaces of non-positive curvature* : Grundlehren der Math. Wiss. No. 319, Springer (1999).
- [BroCM] J.F.Brock, R.D.Canary, Y.N.Minsky, *The classification of Kleinian surface groups II: The ending lamination conjecture* : preprint (2004).
- [BuM] R.G.Burns, O.Macedonska, *Balanced presentations of the trivial group* : Bull. London Math. Soc. **25** (1993) 513–526.
- [Can] J.W.Cannon, *The combinatorial structure of cocompact discrete hyperbolic groups* : Geom. Dedicata **16** (1984) 123–148.
- [CanFKP] J.W.Cannon, W.J.Floyd, R.Kenyon, W.R.Parry, *Hyperbolic geometry* : in “Flavors of geometry”, (ed. S.Levi), Math. Sci. Res. Inst. Publ. No. 31, Cambridge Univ. Press (1997) 59–115.
- [CasJ] A.Casson, D.Jungreis, *Convergence groups and Seifert fibered 3-manifolds* : Invent. Math. **118** (1994) 441–456.

- [Cha] C.Champetier, *Propriétés statistiques des groupes de présentation finie* : Adv. Math. **116** (1995) 197–262.
- [Chi] I.Chiswell, *Introduction to  $\Lambda$ -trees* : World Scientific (2001).
- [ConM] A.Connes, H.Moscovici, *Cyclic cohomology, the Novikov conjecture and hyperbolic groups* : Topology **29** (1990) 345–388.
- [CooDP] M.Coornaert, T.Delzant, A.Papadopoulos, *Les groupes hyperboliques de Gromov* : Lecture Notes in Mathematics No. 1441, Springer Verlag (1990).
- [CouGHN] D.Coulson, O.A.Goodman, C.D.Hodgson, W.Neumann, *Computing arithmetic invariants of 3-manifolds* : Experimental Math. **9** (2000) 127–152.
- [Da] F.Dahmani, : *Combination of convergence groups* : Geom. Topol. **7** (2003) 933–963.
- [Dr] C.Druțu *Quasi-isometry invariants and asymptotic cones* : Internat. J. Algebra Comput. **12** (2002) 99–135.
- [Du] M.J.Dunwoody, *The accessibility of finitely presented groups* : Invent. Math. **81** (1985) 449–457.
- [DuSa] M.J.Dunwoody, M.E.Sageev, *JSJ-splittings for finitely presented groups over slender subgroups* : Invent. Math. **135** (1999) 35–44.
- [DyP] A.Dyubina, I.Polterovich, *Explicit constructions of universal R-trees and asymptotic geometry of hyperbolic spaces* : Bull. London. Math. Soc. **33** (2001) 727–734.
- [ECHLPT] D.B.A.Epstein, J.W.Cannon, D.F.Holt, S.V.F.Levy, M.-S.Paterson, W.P.Thurston, *Word processing in groups* : Jones and Bartlett (1992).
- [Fa] B.Farb, *Relatively hyperbolic groups* : Geom. Funct. Anal. **8** (1998) 810–840.
- [FuP] K.Fujiwara, P.Papasoglu, *JSJ decompositions of finitely presented groups and complexes of groups* : to appear in Geom. Funct. Anal.
- [Gaba] D.Gabai, *Convergence groups are fuchsian groups* : Ann. of

Math. **136** (1992) 447–510.

[GaboLP] D.Gaboriau, G.Levitt, F.Paulin, *Pseudogroups of isometries of  $\mathbf{R}$  and Rips' theorem on free actions on  $\mathbf{R}$ -trees* : Israel J. Math. **87** (1994) 403–426.

[GeM] F.W.Gehring, G.J.Martin, *Discrete quasiconformal groups I* : Proc. London Math. Soc. **55** (1987) 331–358.

[GhH] E.Ghys, P.de la Harpe, *Sur les groupes hyperboliques d'après Mikhael Gromov* : Progress in Maths. No. 83, Birkhäuser (1990).

[Go] W.M.Goldman, *Complex hyperbolic geometry* : Oxford Mathematical Monographs, Oxford University Press (1999).

[Gre] M.J.Greenberg, *Euclidean and non-euclidean geometries: development and history* : W.H.Freeman and Co. (1973).

[Gro1] M.Gromov, *Groups of polynomial growth and expanding maps* : Inst. Hautes Études Sci. Publ. Math. No. 53 (1981) 53–75.

[Gro2] M.Gromov, *Hyperbolic groups* : in “Essays in Group Theory” (ed. S.M.Gersten) M.S.R.I. Publications No. 8, Springer-Verlag (1987) 75–263.

[Gro3] M.Gromov, *Asymptotic invariants of infinite groups* : in “Geometric group theory, Vol. 2” (eds. G.A.Niblo, M.A.Roller) London Math. Soc. Lecture Notes Series No. 182, Cambridge Univ. Press (1993) 1–295.

[Gro4] M.Gromov (edited by J.LaFontaine and P.Pansu), *Metric structures for Reimannian and non-Riemannian spaces* : Progress in Mathematics No. 152, Birkhäuser (1998).

[Ham] U.Hamenstädt, *Geometry of the complex of curves and of Teichmüller space* : Preprint, Bonn (2005).

[Harp] P.de la Harpe, *Topics in geometric group theory* : Chicago Lectures in Mathematics, University of Chicago Press (2000).

[Harv] W.J.Harvey, *Boundary structure of the modular group* : in “Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference” (ed. I.Kra, B.Maskit), Ann. of Math. Stud. No. 97, Princeton University Press (1981) 245–251.

- [Hi] G.Higman, *Subgroups of finitely presented groups* : Proc. Roy. Soc. **262** (1961) 455-475.
- [Ho] H.Hopf, *Enden offner Räume und unendliche diskontinuierliche Gruppen* : Comment. Math. Helv. **16** (1943) 81-100.
- [ImT] Y.Imayoshi, M.Taniguchi, *An introduction to Teichmüller spaces* : Springer-Verlag (1992).
- [Iv] B.Iversen, *Hyperbolic geometry* : London Math. Soc. Student Texts No. 25, Cambridge Univ. Press (1992).
- [JaS] W.H.Jaco, P.B.Shalen, *Seifert fibered spaces in 3-manifolds* : Mem. Amer. Math. Soc. Mem. No. 220 (1979).
- [Jo] K.Johannson, *Homotopy equivalences of 3-manifolds with boundary* : Springer Lecture Notes in Mathematics, No. 761, Springer Verlag, Berlin (1979)
- [Kap-iB] I.Kapovich, N.Benakli, *Boundaries of hyperbolic groups* : in "Combinatorial and geometric group theory" (eds. S.Cleary, R.Gilman, A.G.Myasnikov, V.Shpilrain), Contemp Math. No. 296, Amer. Math. Soc. (2002) 39–93.
- [Kap-mP] M.Kapovich, L.Potyagailo, *On absence of Ahlfors' finiteness theorem for Kleinian groups in dimension 3* : Topology and its Applications **40** (1991) 83–91.
- [KasS] G.Kasparov, G.Skandalis, *Groups acting properly on “bolic” spaces and the Novikov conjecture* : Ann. of Math. **158** (2003) 165–206.
- [KlL] B.Kleiner, J.Lott, *Notes on Perelman’s papers* : Notes, Ann Arbor.
- [LS] R.C.Lyndon, P.Schupp, *Combinatorial group theory* : Ergebnisse der Mathematik und ihrer Grenzgebiete, No. 89, Springer (1977).
- [MagKS] W.Magnus, A.Karrass, D.Solitar, *Combinatorial group theory: presentations of groups in terms of generators and relations* : Interscience (1966).
- [MasM] H.A.Masur, Y.N.Minsky, *Geometry of the complex of curves I: hyperbolicity* : Invent. Math. **138** (1999) 103-149.

- [Me] G.Mess, *The Seifert conjecture and groups which are coarse quasiisometric to planes* : preprint (1988).
- [Mine] I.Mineyev, *Flows and joins of metric spaces* : Geom. Topol. **9** (2005) 403–482.
- [MineY] I.Mineyev, G.Yu, *The Baum-Connes conjecture for hyperbolic groups* : Invent. Math. **149** (2002) 97–122.
- [Mins] Y.N.Minsky, *The classification of Kleinian surface groups I : Models and bounds* : preprint, Stony Brook (2002).
- [MonZ] D.Montgomery, L.Zippin, *Topological transformation groups* : Interscience (1955).
- [Mor] J.W.Morgan, *Recent progress on the Poincaré conjecture and the classification of 3-manifolds* : Bull. Amer. Math. Soc. **42** (2005) 57–78.
- [MorS] J.W.Morgan, P.B.Shalen, *Valuations, trees, and degenerations of hyperbolic structures* : Ann. of Math. **120** (1984) 401–476.
- [Mos] G.D.Mostow, *Quasi-conformal mappings in n-space and the rigidity of hyperbolic space forms* : Inst. Hautes Études Sci. Publ. Math. No. (1968) 53–104.
- [O] A.Yu.Ol'shanskii, *Hyperbolicity of groups with subquadratic isoperimetric inequality* : International J. Alg. and Comp. **1** (1991) 281–289.
- [Pap] P.Papasoglu, *On the sub-quadratic isoperimetric inequality* : in Proceedings of the Ohio-State program in geometric group theory (ed. R. Charney and M. Davis), de Gruyter (1995) 149–157.
- [Pau] F.Paulin, *Actions de groupes sur les arbres* : Séminaire Bourbaki, Exposé 808, Astérisque No. 241, Société Mathématique de France (1997) 97–138.
- [Pe1] G.Perelman, *The entropy formula for Ricci flow and its geometric applications* : preprint, Saint Petersburg (2003).
- [Pe2] G.Perelman, *Ricci flow with surgery on 3-manifolds* : preprint, Saint Petersburg (2003).
- [Re] A.W.Reid, *A note on trace fields of Kleinian groups* : Bull.

- London Math. Soc. **22** (1990) 349–352.
- [RiS] E.Rips, Z.Sela, *Cyclic splittings of finitely presented groups and the canonical JSJ decomposition* : Ann. of Math. **146** (1997) 53–109.
- [SaBR] M.V.Sapir, J.-C.Birget, E.Rips, *Isoperimetric and isodiametric functions of groups* : Ann. of Math. **156** (2002) 345–466.
- [ScW] P.Scott, T.Wall, *Topological methods in group theory* : in “Homological group theory” (ed. C.T.C.Wall) London Math. Soc. Lecture Note Ser. No. 36, Cambridge Univ. Press (1979) 137–203.
- [Se1] Z.Sela, *Structure and rigidity in (Gromov) hyperbolic groups and discrete groups in rank 1 Lie groups II* : Geom. Funct. Anal. **7** (1997) 561–593.
- [Se2] Z.Sela, *Diophantine geometry over groups I, Makanin-Razborov diagrams* : Publ. Math. Inst. Hautes Études Sci. No. 90 (2001) 31–105.
- [Sha] Y.Shalom, *Harmonic analysis, cohomology, and the large-scale geometry of amenable groups* : Acta Math. **192** (2004) 119–185.
- [Sho] H.Short et al., *Notes on word hyperbolic groups* : in “Group theory from a geometrical viewpoint” (ed. E.Ghys, A.Haefliger, A.Verjovsky), World Scientific (1991) 3–63.
- [Sp] E.H.Spanier, *Algebraic topology* : McGraw-Hill (1966).
- [St] J.R.Stallings, *Group theory and three-dimensional manifolds* : Yale Math. Monographs No. 4, Yale University Press, New Haven (1971).
- [Sz] A.Szczepański, *Relatively hyperbolic groups* : Michigan Math. J. **45** (1998) 611–618.
- [Th] W.P.Thurston, *Three-dimensional manifolds, Kleinian groups and hyperbolic geometry* : Bull. Amer. Math. Soc. **9** (1982) 357–381.
- [Tu1] P.Tukia, *Homeomorphic conjugates of fuchsian groups* : J. reine angew. Math. **391** (1988) 1–54.
- [Tu2] P.Tukia, *Convergence groups and Gromov’s metric hyperbolic spaces* : New Zealand J. Math. **23** (1994) 157–187.

- [V] N.T.Varopoulos, *Théorie du potentiel sur des groupes et des variétés* : C. R. Acad. Sc. Paris, Sér. I **102** (1986) 203–205.
- [W] J.R.WEEKS, : *The shape of space. How to visualize surfaces and three-dimensional manifolds* : Monographs and textbooks in pure and applied mathematics, No. 96, Marcel Dekker (1985).
- [Y] A.Yaman, *A topological characterisation of relatively hyperbolic groups* : J. reine. angew. Math. **566** (2004) 41–89.