Robert Bieri

Publications 1971 - 2016

A. Research monographs

1. Homological dimension of discrete groups. Queen Mary College Mathematic Notes, London 1976.
      Second edition (with remarks on recent developments) 1981.
2. *On groups of PL--homeomorphisms of the real line* (with R. Strebel). Mathematical Surveys and Monographs 215,
      American Mathematical Society 2016.
3. *Geometric invariants for discrete groups* (with R. Strebel). Preprint (238 pages).

B. In mathematical Journals and conference proceedings.

1. *Groupes a dualite de Poincaré*. <u>Comptes rendus</u> **273** (1971), 6-8 (Announcement of 3).
2. *Groupes a dualite de Poincaré et groupes resolubles.* <u>Comptes rendus</u> **274** (1972), 1608-1611 (Announcement of 4).
3. *Gruppen mit Poincaré-Dualität* (Ph.D. Thesis). <u>Comment. Math. Helvetici</u> **47** (1972), 373-396.
4. *Ueber die cohomologische Dimension der aufloesbaren Gruppen.* <u>Math. Zeitschrift</u> **128** (1972), 235-243.
5. *Groupes a dualite homologique* (with B. Eckmann). <u>Comptes rendus</u> **275** (1972), 899-902 (Announcement of 6).
6. *Groups with homological duality generalizing Poincaré-duality* (with B. Eckmann). <u>Invent. math.</u> **20** (1973), 103-124.
7. *Proprietes de finitude des groupes a dualite* (with B. Eckmann). <u>Comptes rendus</u> **276** (1973), 831-833 (Announcement
      of 8).
8. *Finiteness properties of duality groups* (with B. Eckmann). <u>Comment Math. Helvetici</u> **49** (1974), 74-83.
9. *Amalgamated free products of groups and homological duality* (with B. Eckmann). <u>Comment. Math. Helvetici</u> **49** (1974),
      460-478.
10. *Groups of finite cohomological dimension and duality groups over a ring.* <u>Journal of Pure and Applied Algebra</u> **6**
      (1975), 83-109.
11. *Mayer-Vietoris sequences for HNN-groups and homological duality.* <u>Math. Zeitschrift</u> **143** (1975), 123-130.
12. *Normal subgroups in duality groups and in groups of cohomological dimension 2.* <u>Journal of Pure and Applied Algebra</u>
      7 (1976), 35-51.
13. *A group with torsion-free 2-divisible homology and Cappell's result on the Novikov Conjecture.* <u>Inventiones math.</u> **33**
      (1976), 181-184.
14. *Cobordism for Poincaré duality groups* (with B. Eckmann). <u>Bull. Amer. Math. Soc.</u> **82** (Januar 1976), 137-139.
15. *Constructable solvable groups* (with G. Baumslag). <u>Math. Zeitschrift</u> **151** (1976), 249-257.
16. *Almost finitely presented soluble groups* (with R. Strebel). <u>Comment. Math. Helvetici</u> **53** (1978), 258-278.
17. *Relative homology and Poincaré duality for group pairs* (with B. Eckmann). <u>Journal of Pure and Applied Algebra</u> **13**
      (1978), 277-319.
18. *On groups of cohomology dimension 2.* In *"Topology and Algebra"* (Proceedings of a Colloquium in Honor of B.
      Eckmann). Monographie No. **26** de <u>L'Enseignement Mathematique</u>, Genève 1978.
19. *Soluble groups with coherent group ring* (with R. Strebel). In *Homological group theory*; Proceedings of a symposium
      in Durham 1977. <u>LMS Lecture Notes Series</u> **36**, Cambridge University Press, 235-240.
20. *Metabelian quotients of finitely presented soluble groups are finitely presented* (with R. Strebel). In *Homological group
      theory*; Proceedings of a symposium in Durham 1977. <u>LMS Lecture Notes Series</u> **36**, Cambridge University Press
      (Announcement of 23), 231-234.
21. *Two dimensional Poincaré duality groups and pairs* (with B. Eckmann). In *Homological group theory*; Proceedings of
      a symposium in Durham 1977. <u>LMS Lecture Notes Series</u> **36**, Cambridge University Press, 225-230.
22. *Finitely presented soluble groups*. Seminaire d'algebre Paul Dubreil, Paris 1977-78, <u>Springer Lecture Notes in Math</u>.
      740, Berlin-Heidelberg-New York 1979, 1-8.
23. *Valuations and finitely presented metabelian groups* (with R. Strebel). <u>Proc. London Math. Soc. (3)</u> **41** (1980), 439-464.
24. *A connection between the integral homology and the centre of a rational linear group*. <u>Math. Zeitschrift</u> **170** (1980),
      263-266.
25. *A geometric invariant for modules over an Abelian group* (with R. Strebel). <u>Journal fuer die reine und angew. Math</u>.
      322 (1981), 170-189.
26. *On the existence of finitely generated normal subgroups with infinite cyclic quotients* (with R. Strebel). <u>Archiv d. Math</u>.
      36 (1981), 401-403.

27. *A geometric invariant for nilpotent-by-Abelian-by-finite groups* (with R. Strebel). Journal of Pure and Appl. Algebra **25** (1982), 1-20.

28. *A 1.5-dimensional version of Hopf's Theorem on the number of ends of a group.* Comment. Math. Helvetici **57** (1982), 25-40.

29. *Metabelian groups of type (FP)-infty are virtually of type (FP)* (with J. R. J. Groves). Proc. London Math. Soc. (3) **45** (1982), 365-384.

30. *The geometry of the set of characters induced by valuations* (with J. R. J. Groves). Journal f. d. reine und angew. Math. **347** (1984), 168-195.

31. *Tensor powers of modules over finitely generated Abelian groups* (with J. R. J. Groves). Journal of Algebra **97** (1985), 68-78.

32. *A rigidity property for the set of all characters induces by valuations* (with J. R. J. Groves). Transact. Amer. Math. Soc. **294** (1986), 425-434.

33. *A geometric invariant of discrete groups* (with W. D. Neumann and R.Strebel). Invent. math. **90** (1987), 451-477.

34. *Invariants geometriques superieurs d'un groupe discret* (with B. Renz). Comptes rendus **303** (1986), 435-437 (Announcement of 35).

35. *Valuations on free resolutions and higher geometric invariants of groups* (with B. Renz). Comment. Math. Helv. **63** (1988), 464-497.

36. *Group pairs with periodic cohomology* (with O. Talelli). Journ. Pure and Appl. Algebra **64** (1990), 229-238.

37. *Subnormal subgroups of 3-dimensional Poincaré Duality groups* (mit J. Hillmann), Math. Zeitschrift **206**, 67-69(1991).

38. *The geometric invariants of a group – A survey with emphasis on the homotopical approach.* In "*Geometric group theory*", (Niblo and Roller ed.) Vol.1, 24-36. London Math. Soc. Lecture Notes Series **181**, Cambridge University Press 1993, (24-36).

39. *Kernels of actions on non-positively curved spaces* (with R. Geoghegan). In *Geometry and cohomology in group-theory* (Kropholler, Niblo and Stoehr, ed.). London Math. Soc. Lecture Notes **252**, Cambridge University Press 1998 (24-38).

40. *Finiteness length and connectivity length for groups.* In "*Geometric Group Theory Down Under*", (Cossey, Miller III, Neumann and Shapiro, ed.) de Gruyter Verlag, Berlin 1999.

41. *A remark on the Polyhedrality Theorem for the Sigma- invariants of modules over Abelian groups* (with J. Harlander). Math. Proc. Cambridge Phil. Soc. (2001), 131, 39.

42. *Controlled topology and group actions* (with R. Geoghegan). In Groups: *Topological, Combinatorial and Arithmetic Aspects*, ed. T.W. Mueller, London Math. Soc. Lecture Note Series **311**, Cambridge University Press, pp. 43-63, (2004).

43. *On the FP-3-Conjecture for metabelian groups* (with J. Harlander). J. London Math. Soc.(2) **64** (2001), 595-610.

44. *Connectivity properties of group actions on non-positively curved spaces* (with R. Geoghegan). Memoirs of the AMS **765** (2003), 83 Seiten.

45. *Topological properties of SL-2- actions on the hyperbolic plane* (with R. Geoghegan). Geometriae Dedicata **99** (2003), 137-166.

46. *Deficiency and the Geometric Invariants of a Group* (with an appendix by Pascal Schweitzer)}. Journal of Pure and Applied Algebra **208** (2006), 951-959.

47. *Sigma invariants of direct products of groups* (with R. Geoghegan). Groups Geom. Dyn. **4** (2010), 251-261.

48. *The sigma invariants of Thompson's group F* (with R. Geoghegan and D. Kochloukova). Groups Geom. Dyn. **4** (2010), 263-273.

49. *Infinite presentability of groups and condensation* (with Yves de Cornulier, Luc Guyot, Ralph Strebel) J. Inst. Math. Jussieu **13**, 811-848 (2014). arXiv: 1010.0271v2 [math.GR]

50. *On subsets of S^n whose (n+1)-point subsets are contained in open hemisheres* (with Peter Kropholler, Brendan Owens). New York J. Math. **20**, 1021-1041 (2014). arXiv: 1208.5041 [math.GR].

51. *Limit sets for modules over groups on CAT(0) spaces – from the Euclidean to the hyperbolic* (with Ross Geoghegan). Proc London Math. Soc. (2016) **112** (6), 1059-1102. arXiv: 1306.3403 [math.GR].

52. *Groups of piecewise isometric permutations of lattice points* (with Heike Sach). arXiv: 1606.07728 [math.GR], (Submitted on 24 Jun 2016).

53. *Higher horospherical limit sets for modules over groups on CAT(0) spaces* (with Ross Geoghegan). In preparation.