

List of publications of Wolfgang Lück

Date: March 5, 2018

Comments:

- All papers can be downloaded from my home page
http://wwwmath.uni-muenster.de/reine/inst/lueck/homepages/wolfgang_lueck/index.php
- The entry [62] is my Ph.D.-thesis.
- The entry [70] ist a manuscript of a course.
- The entries [48, 69, 87, 90] are books.
- The entries [1, 32, 33] are proceedings for which I was responsible as editor.
- The entries [40, 45] are preprints, which have been posted on the ArXive but have not yet been accepted by or appeared in a journal.
- All other entries have already been accepted by or appeared in journals.
- The entries [30, 82, 83, 86, 92, 94, 95, 96, 97, 99, 100, 103, 105, 106, 118] are survey articles.

References

- [1] **Ausoni, C., Hess, K., Johnson, B., Lück, W., Scherer, J. (Herausgeber)**, “*An Alpine expedition through algebraic topology*” Proceedings of the fourth Arolla conference on algebraic topology, Arolla, Switzerland, August 20-25, 2012, Providence, RI: American Mathematical Society (AMS) (2014).
- [2] **Bartels, Echterhoff, A. and Lück, W.:** “*Inheritance of Isomorphism Conjectures under colimits*”, Proceedings of the conference ‘K-theory and non-commutative geometry’ in Valladolid, August/September 2006, EMS Series of Congress reports, editors: Cortinaz, Cuntz, Karoubi, Nest, Weibel, European Mathematical Society, 41–70 (2008).
- [3] **Bartels, A. and Farrell, T. and Lück, W.:** “*The Farrell-Jones Conjecture for cocompact lattices in virtually connected Lie groups*”, Journal of the AMS 27 (2), 339–388 (2014).
- [4] **Bartels, A. and Lück, W.:** “*Isomorphisms conjecture for homotopy K-theory and groups acting on trees*”, Journal of Pure and Applied Algebra 205, 660–696 (2006).
- [5] **Bartels, A. and Lück, W.:** “*Induction theorems and isomorphisms conjectures in K- and L-theory*”, Forum Math. 19, 379–406 (2007).

- [6] **Bartels, A. and Lück, W.:** “*On crossed product rings with twisted involutions, their module categories and L-theory*”, Proceedings of the summer school “Cohomology of groups and algebraic K-theory”, Hangzhou, China, July 1 until July 12 in 2007, Advanced Lectures in Mathematics 12, International Press, 1-55 (2009).
- [7] **Bartels, A. and Lück, W.:** “*The Borel Conjecture for hyperbolic and CAT(0)-groups*”, Annals of Mathematics 175, 631–689 (2012).
- [8] **Bartels, A. and Lück, W.:** “*Geodesic flow for CAT(0)-groups*”, Geometry and Topology 16, 1345-1391 (2012).
- [9] **Bartels, A. and Lück, W.:** “*The Farrell-Hsiang method revisited*”, Math. Annalen 175, 209–226 (2012).
- [10] **Bartels, A., Lück, W. and Reich, H.:** “*Equivariant covers for hyperbolic groups*”, Geometry and Topology 12, 1799–1882 (2008).
- [11] **Bartels, A., Lück, W. and Reich, H.:** “*The K-theoretic Farrell-Jones Conjecture for hyperbolic groups*”, Inventiones mathematicae 172, 29–70 (2008).
- [12] **Bartels, A., Lück, W. and Reich, H.:** “*On the Farrell-Jones Conjecture and its applications*”, Journal of Topology 1, 57–86 (2008).
- [13] **Bartels, A., Lück, W., Reich, H. and Rüpning, H.:** “*K- and L-theory of group rings over $GL_n(\mathbb{Z})$* ”, Publ. Math. IHES 119, 97–125 (2014).
- [14] **Bartels, A., Lück, W., and Weinberger, S.:** “*On hyperbolic groups with spheres as boundary*”, Journal of Differential Geometry 86 (1), 1–16, (2010) (2010).
- [15] **Bergeron, N, Linnell, P., Lück, W. and Sauer, R.:** “*On the growth of Betti numbers in p-adic analytic towers*”, Groups, Geometry and Dynamics 8, 311329 (2014).
- [16] **Blagojević, Pavle V. M. and Cohen, F. and Lück, Wolfgang and Ziegler, Günter M.:** “*On complex highly regular embeddings and the extended Vassiliev conjecture*”, arXiv:1410.6052 [math.AT], to appear in IMRN (2014).
- [17] **Blagojević, Pavle V. M. and Lück, Wolfgang and Ziegler, Günter M.:** “*Equivariant Topology of Configuration Spaces*”, Journal of Topology 8 (2), 414–456 (2015).
- [18] **Blagojević, Pavle V. M. and Lück, Wolfgang and Ziegler, Günter M.:** “*On highly regular embeddings*”, Transactions of the AMS 368(4), 2891–2912 (2016).

- [19] **Brown, N. P., Dykema, K. J. and Jung, K. (with appendix by Lück, W.):** “Free entropy dimension in amalgamated free products”, Proc. Lond. Math. Soc. 97, 339–367 (2008).
- [20] **Connolly, F. and Lück, W.:** “The involution on the equivariant Whitehead group”, K-theory 3, 123 – 140 (1990).
- [21] **Davis, J. and Lück, W.,** “Spaces over a Category, Assembly Maps in Isomorphism Conjecture in K-and L-Theory”, K-theory 15, 201 – 252 (1998).
- [22] **Davis, J. and Lück, W.,** “The p -chain spectral sequence”, K-theory 30, 71–104 (2003).
- [23] **Davis, J. and Lück, W.,** “The topological K-theory of certain crystallographic groups”, Journal of Non-Commutative Geometry 7, 373 – 431 (2013).
- [24] **Dubois, F. , Friedl, S., and and Lück, W.,** “Three flavors of twisted knot invariants”, in *Introduction to modern mathematics*, in Advanced Lecture in Mathematics 33 International Press, 143–170 (2015)
- [25] **Dubois, F. , Friedl, S., and and Lück, W.,** “The L^2 -Alexander torsion of 3-manifolds”, Algebraic & Geometric Topology 15(6), 3599–3612 (2015).
- [26] **Dubois, F. , Friedl, S., and and Lück, W.,** “The L^2 -Alexander torsion is symmetric”, AGT 15, 3599–3612 (2015).
- [27] **Dubois, F. , Friedl, S., and and Lück, W.,** “The L^2 -Alexander torsion of 3-manifolds”, Journal of Topology 9 (3), 889–926 (2016).
- [28] **Echterhoff, S., Lück, W., Philipps, C. and Walters, S.:** “The Structure of Crossed Products of Irrational Rotation Algebras by Finite Subgroups of $SL_2(\mathbb{Z})$ ”, Crelle’s Journal für reine und angewandte Mathematik 639, 173-221 (2010).
- [29] **Enkelmann, N.,E. and Lück, Wolfgang and Pieper, Malte and Ullmann, M. and Wings, C.:** “On the Farrell-Jones Conjecture for Waldhausen’s A -theory”, Preprint, arXiv:1607.06395 [math.GT], to appear in Geometry and Topology (2016).
- [30] **Epple, M. and Lück, W.:** “Knoten und Polynome: Ein Beispiel für die Wechselbeziehung zwischen Geometrie und Algebra”, preprint, Mainz (1994).
- [31] **Ershov, M, and Lück, :** “The first L^2 -Betti number and approximation in arbitrary characteristic”, Documenta 19, 313–331 (2014).
- [32] **Farber, M., Lück, W. and Weinberger, S. (Herausgeber):** “Tel Aviv Topology Conference: Rothenberg Festschrift”, international conference on topology, June 1-5, 1998, Tel Aviv, Contemporary Mathematics 231 (1999).

- [33] **Farrell, T., Göttsche, L. and Lück, W. (Herausgeber):** “*High-dimensional manifold theory*”, Proceedings of the School / Conference in Trieste, in May and June 2001. World Scientific (2003).
- [34] **Farrell, T., Jones, L. and Lück, W.:** “*A Caveat on the Isomorphism Conjecture in L-Theory*”, Forum Math. 14, 413 – 418 (2002).
- [35] **Farrell, T., Jones, L., Lück, W. and Steimle, W.:** “*Obstructions to fibering a manifold*”, Geometriae Dedicata 148 (1), 35–69 (2010).
- [36] **Farrell, T., Jones, L., Lück, W. and Steimle, W.:** “*Approximately fibering a manifold over an aspherical one*”, Math. Annalen 370, 669–726 (2018).
- [37] **Fiore, T., Lück, W. and Sauer, R.:** “*Finiteness obstructions and Euler characteristics of categories*”, Advances in Mathematics 226, 2371–2469 (2011).
- [38] **Fiore, T., Lück, W. and Sauer, R.:** “*Euler characteristics of categories and homotopy colimits*”, Documenta 16, 301-354 (2010).
- [39] **Friedl, S., and Lück, W.:** “*The L^2 -torsion function and the Thurston norm of 3-manifolds*”, Preprint, arXiv:1510.00264 [math.GT], to appear in Commentarii Mathematici Helvetici (2015).
- [40] **Friedl, S., and Lück, W.:** “ *L^2 -Euler characteristics and the Thurston norm*”, Preprint, arXiv:1609.07805 [math.GT] (2016).
- [41] **Friedl, S., and Lück, W.,** *Universal L^2 -torsion, polytopes and applications to 3-manifold*, Proc. of the LMS 114, 1114–1151 (2017).
- [42] **Friedl, S., and Lück, W. and Tillmann, S.,** *Groups and polytopes*, Preprint, arXiv:1611.01857 [math.GT] (2016).
- [43] **Joachim, M. and Lück, W.:** “*Topological K -(co-)homology of classifying spaces of discrete groups*”, A> 13, 1 – 34 (2013).
- [44] **Hambleton, I. and Lück, W.:** “*Induction and computation of Bass Nil groups for finite groups*”, Pure and Applied Mathematics Quaterly volume 8, number 1, (Special Issue: In honour of Thomas Farrell and Lowell E. Jones Part 1), 199 – 219 (2012).
- [45] **Hebestreit, F., Land, M., Lück, W., and Randal-Williams, O.:** “*A vanishing theorem for tautological classes of aspherical manifolds*”, Preprint, arXiv:1705.06232 [math.AT] (2017).
- [46] **Kammeyer, H and Lück, W. and Rüping, H.:** “*The Farrell-Jones conjecture for arbitrary lattices in virtually connected Lie groups*”, Geometry and Topology 20 (3), 1275–1287 (2016).

- [47] **Koch, H. and Lück, W.:** “*On the spectral density function of the Laplacian of a graph*”, in *Expositiones Mathematicae* 32, 178-189 (2014).
- [48] **Kreck, M. and Lück, W.:** “*The Novikov Conjecture: Geometry and Algebra*”, *Oberwolfach Seminars* 33, Birkhäuser (2005).
- [49] **Kreck, M. and Lück, W.:** “*Topological rigidity of non-aspherical manifolds*”, *Pure and Applied Mathematics Quarterly* 5 (3), special issue in honor of Friedrich Hirzebruch part 2, 873–914 (2009).
- [50] **Kreck, M., Leichtnam, E. and Lück, W.:** “*On the cut and paste property of higher signatures of a closed oriented manifold*”, *Topology* 41, 725 - 744 (2002).
- [51] **Kreck, M., Lück, W. and Teichner, P.:** “*Stable Prime Decompositions of Four-Manifolds*”, in “*Prospects in topology*”, Proceedings of a conference in honour of William Browder, Princeton, March 1994, *Annals of Mathematics Studies* 138, 251 – 269 Princeton University Press (1995).
- [52] **Kreck, M., Lück, W. and Teichner, P.:** “*Counterexamples to the Kneser conjecture in dimension four*”, *Comm. Math. Helvetici* 70, 423 – 433 (1995).
- [53] **Kropholler, P. , Linnell, P. and Lück, W.,:** “*Groups of small homological dimension and the Atiyah Conjecture*”, Proceedings of the Symposium “*Geometry and Cohomology in Group Theory*”, Durham, July 2003, editors: Bridson, M, Kropholler, P. H. and Leary, I. J., *LMS Lecture Notes Series* 358, 272–277, Cambridge University Press (2009).
- [54] **Laitinen, E. and Lück, W.:** “*Equivariant Lefschetz classes*”, *Osaka J. Math.* 26, 491 – 525 (1989).
- [55] **Langer, M. and Lück, W.:** “*On the group cohomology of the semi-direct product $\mathbb{Z}^n \times_{\rho} \mathbb{Z}/m$ and a conjecture of Adem-Ge-Pan-Petrosyan*”, *Journal of Pure and Applied Algebra* 216, 1318-1339 (2012).
- [56] **Langer, M. and Lück, W.:** “*Topological K-theory of the group C^* -algebra of a semi-direct product $\mathbb{Z}^n \rtimes \mathbb{Z}/m$ for a free conjugation action*”, *Journal of Topology and Analysis* 4, 121–172 (2012).
- [57] **Li, X. and Lück, W.:** “*K-theory for ring C^* -algebras – the case of number fields with higher roots of unity*”, *Journal of Topology and Analysis* 4 (4), 449 –479 (2012).
- [58] **Linnell, P, and Lück, W.:** “*Localization, Whitehead groups, and the Atiyah Conjecture*”, *Annals of K-Theory* 3-1 (2018), 33–53.
- [59] **Linnell, P, Lück, W. and Sauer, R.:** “*The limit F_p -Betti numbers of a tower of finite covers with amenable fundamental groups*”, *Proceedings of the AMS* 139 (2), 421–434 (2011).

- [60] **Linnell, P., Lück, W. and Schick, T.:** “*The Ore condition, affiliated operators, and the lamplighter group*”, Proceedings of the conference “Topology of high-dimensional manifolds”, June 2001, ICTP, Trieste, 315–321 World Scientific (2003).
- [61] **Lott, J. and Lück, W.:** “ *L^2 -topological invariants of 3-manifolds*”, Inventiones Math. 120, 15 – 60 (1995).
- [62] **Lück, W.:** “*Eine allgemeine algebraische Beschreibung des Transfers für Faserungen auf projektiven Klassengruppen und Whiteheadgruppen*”, Ph. D. thesis, Göttingen (1984).
- [63] **Lück, W.:** “*The transfer maps induced in the algebraic K_0 - and K_1 -groups by a fibration I*”, Math. Scand. 59, 93 – 121 (1986).
- [64] **Lück, W.:** “*The transfer maps induced in the algebraic K_0 - and K_1 -groups by a fibration II*”, J. of Pure and Applied Algebra 45, 143 – 169 (1987).
- [65] **Lück, W.:** “*Equivariant Eilenberg-MacLane spaces $K(\mathbf{G}, \mu, 1)$ for possibly non-connected or empty fixed point sets*”, Manusc. Math. 58, 67 – 75 (1987).
- [66] **Lück, W.:** “*The geometric finiteness obstruction*”, Proc of the LMS 54, 367 – 384 (1987).
- [67] **Lück, W.:** “*The equivariant degree*”, Konferenzbericht der Göttinger Topologie Tagung 1987 (editor : tom Dieck), Lecture Notes in Mathematics 1361, 123 – 166, Springer (1988).
- [68] **Lück, W.:** “*Equivariant Reidemeister torsion and homotopy representations*”, Math. Gott. 15 (1988).
- [69] **Lück, W.:** “*Transformation groups and algebraic K-theory*”, Lecture Notes in Mathematics vol. 1408 (1989).
- [70] **Lück, W.:** “*On the Casson invariant, the Jones polynomial and its connection to quantum field theory*”, Vorlesungsausarbeitung, Göttingen (1990).
- [71] **Lück, W.:** “*Analytic and algebraic torsion for manifolds with boundary and symmetries*”, Journal of Differential Geometry 37, 263 – 322 (1993).
- [72] **Lück, W.:** “ *L^2 -torsion and 3-manifolds*”, Conference Proceedings and Lecture Notes in Geometry and Topology Volume III “Low-dimensional topology”, Knoxville 1992, editor: Klaus Johannson, International Press, 75 – 107 (1994).
- [73] **Lück, W.:** “ *L^2 -Betti numbers of mapping tori and groups*”, Topology 33, 203 - 214 (1994).
- [74] **Lück, W.:** “*Approximating L^2 -invariants by their finite-dimensional analogues*”, GAFA 4, 455 – 481 (1994).

- [75] **Lück, W.:** “*Hilbert modules and modules over finite von Neumann algebras and applications to L^2 -invariants*”, Math. Annalen 309, 247 – 285 (1997).
- [76] **Lück, W.:** “*Das Jones-Polynom und Entwirrungsinvarianten in der Knotentheorie*”, Math. Semesterberichte 44, 37 - 72 (1997).
- [77] **Lück, W.:** “ *L^2 -Invarianten von Mannigfaltigkeiten und Gruppen*”, Jber. d. Dt. Math.-Verein 99, 101 – 109 (1997).
- [78] **Lück, W.:** “*Dimension theory of arbitrary modules over finite von Neumann algebras and L^2 -Betti numbers I: Foundations*”, Crelle’s Journal für reine und angewandte Mathematik 495, 135 – 162 (1998).
- [79] **Lück, W.:** “*Dimension theory of arbitrary modules over finite von Neumann algebras and L^2 -Betti numbers II: Applications to Grothendieck groups, L^2 -Euler characteristics and Burnside groups*”, Crelle’s Journal für reine und angewandte Mathematik 496, 213 – 236 (1998).
- [80] **Lück, W.:** “*The universal functorial Lefschetz invariant*”, Fundamenta Mathematicae 161, 167 – 215 (1999).
- [81] **Lück, W.:** “*The type of the classifying space for a family of subgroups*”, Journal of Pure and Applied Algebra 149, 177 – 203 (2000).
- [82] **Lück, W.:** “ *L^2 -Invariants and Their Applications to Geometry, Group Theory and Spectral Theory*”, in “Mathematics Unlimited – 2001 and Beyond”, Springer (2001).
- [83] **Lück, W.:** “ *L^2 -invariants of regular coverings of compact manifolds and CW-complexes*”, in “Handbook of geometric topology”, editors: Davermann, R.J. and Sher, R.B., 735 – 817, Elsevier (2002).
- [84] **Lück, W.:** “*Chern characters for proper equivariant homology theories and applications to K - and L -theory*”, Crelle’s Journal für reine und angewandte Mathematik 543, 193 – 234 (2002).
- [85] **Lück, W.:** “*The relation between the Baum-Connes Conjecture and the Trace Conjecture*”, Inventiones Math. 149, 123 - 152 (2002).
- [86] **Lück, W.:** “*A basic introduction to surgery theory*”, ICTP Lecture Notes Series 9, Band 1, of the school “High-dimensional manifold theory” in Trieste, May/June 2001, 1 – 224, Abdus Salam International Centre for Theoretical Physics, Trieste (2002).
- [87] **Lück, W.:** “ *L^2 -Invariants: Theory and Applications to Geometry and K -Theory*”, Ergebnisse der Mathematik und ihrer Grenzgebiete 44, Springer (2002).
- [88] **Lück, W.:** “*Equivariant Cohomological Chern Characters*”, International Journal of Algebra and Computation 15, 1025–1052 (2005).

- [89] **Lück, W.:** “*K and L-theory of the semi-direct product of the discrete three-dimensional Heisenberg group by $\mathbb{Z}/4$* ”, *Geometry and Topology* 9, 1639 – 1679 (2005).
- [90] **Lück, W.:** “*Algebraische Topologie: Homologie und Mannigfaltigkeiten*”, Vieweg Studium — Aufbaukurs Mathematik, Vieweg (2005).
- [91] **Lück, W.:** “*The Burnside Ring and Equivariant Stable Cohomology for Infinite Groups*”, *Pure and Applied Mathematics Quarterly* 1, 3, 479–541 (2005).
- [92] **Lück, W.:** “*Survey on classifying spaces for families of subgroups*”, in “*Infinite Groups: Geometric, Combinatorial and Dynamical Aspects*”, *Progress in Mathematics*, Vol. 248, editors: Bartholdi, L., Ceccherini-Silberstein, T., Smirnova-Nagnibeda, T. and Zuk, A., 269–322 Birkhäuser (2005).
- [93] **Lück, W.:** “*Rational Computations of the Topological K-Theory of Classifying Spaces of Discrete Groups*”, *Crelle’s Journal für reine und angewandte Mathematik* 611, 163–187 (2007).
- [94] **Lück, W.:** “*On the Farrell-Jones Conjecture and related conjectures*”, extended notes of six talks presented at the summer school “*Cohomology of groups and algebraic K-theory*”, Hangzhou, China, July 1 until July 12 in 2007, arXiv:math.KT/0710.2269v1, *Advanced Lectures in Mathematics* 12, International Press, 269–341 (2009).
- [95] **Lück, W.:** “*The Farrell-Jones Conjecture in algebraic K-and L-theory*”, *L’Enseignement Mathématique* 54 (2) , 140–141 (2008).
- [96] **Lück, W.:** “*Survey on geometric group theory*”, *Münster Journal of Mathematics* 1, 73–108 (2008).
- [97] **Lück, W.:** “ *L^2 -invariants from the algebraic point of view*”, *Proceedings of the Symposium “Geometry and Cohomology in Group Theory”*, Durham, July 2003, editors: Bridson, M, Kropholler, P. H. and Leary, I. J., *LMS Lecture Notes Series* 358, 63–161, Cambridge University Press (2009).
- [98] **Lück, W.:** “*On the classifying space of the family of finite and of virtually cyclic subgroups for CAT(0)-groups*”, *Münster Journal of Mathematics* 2, 201 –214 (2009).
- [99] **Lück, W.:** “*Survey on aspherical manifolds*”, *Proceedings of the 5-th European Congress of Mathematics Amsterdam 14 -18 July 2008*, editors: André Ran, Herman te Riele, Hermann and Jan Wiegerinck, 53–82, EMS (2010).
- [100] **Lück, W.:** “*K- and L-theory of group rings*”, *Proceedings of the 26-th ICM in Hyderabad 2010, Volume II, Section 6 Topology*, 1071-1098 (2011)

- [101] **Lück, W.:** “*Aspherical manifolds*”, Buletin of the manifolds AStlas 2012, 1- 17 (2012).
- [102] **Lück, W.:** “*Approximating L^2 -invariants and homology growth*”, GAFA 23 (2), 622-663 (2013).
- [103] **Lück, W.:** “*Some open problems about aspherical closed manifolds*”, in Trends in contemporary mathematics 8, 33–46 INDAM, Springer (2014)
- [104] **Lück, W.:** “*Estimates for spectral density functions of matrices over $\mathbb{C}[\mathbb{Z}^d]$* ”, Annales mathématiques Blaise Pascal, 22 no. 1, 73– 88 (2015).
- [105] **Lück, W.:** “*Survey on analytic and topological torsion*, preprint, arXiv:1502.07584 [math.GT], in “The Legacy of Bernhard Riemann After One Hundred and Fifty Years” Volume I , Advanced Lectures in Mathematics 35, Higher Education Press, Beijing, 379–416 (2016).
- [106] **Lück, W.:** “*Survey on approximating L^2 -invariants by their classical counterparts: Betti numbers, torsion invariants and homological growth: Betti numbers, torsion invariants and homological growth*”, EMS Surveys in Mathematical Sciences 3, 269–344 (2016).
- [107] **Lück, W.:** “*Twisting L^2 -invariants with finite-dimensional representations*”, preprint, arXiv:1510.00057 [math.GT], to appear in Journal of Topology and Analysis (2015).
- [108] **Lück, W. and Madsen, I.:** “*Equivariant L -theory I*”, Math. Zeitschrift 203, 503 – 526 (1990).
- [109] **Lück, W. and Madsen, I.:** “*Equivariant L -theory II*”, Math. Zeitschrift 204, 253 – 268 (1990).
- [110] **Lück, W. and Meintrup, D.:** “*On the universal space for group actions with compact isotropy*”, Proceedings of the conference “Geometry and Topology” in Aarhus, August 1998, editors: K. Grove, I. Madsen and E. Pedersen, Contemporary Mathematics 258, 293 – 305 , AMS (2000).
- [111] **Lück, W. and Müller, A.:** “*Existence of finitely dominated CW-complexes with $G_1(X) = \pi_1(X)$ and non-vanishing finiteness obstruction*”, Manusc. math. 93, 535 - 538 (1997).
- [112] **Lück, W. and Oliver, R.:** “*The completion theorem in K -theory for proper actions of a discrete group*”, Topology 40, 585 – 616 (2001).
- [113] **Lück, W. and Oliver, R.:** “*Chern characters for equivariant K -theory of proper G -CW-complexes*”, Proceedings of the conference “Cohomological methods in homotopy theory”, Barcelona June 1998, editors: Aguade, J., Broto, C, Casacuberta, C., Progress in Mathematics 196, 217 – 247, Birkhäuser (2001).

- [114] **Lück, W. and Osin, D.:** “*Approximating the first L^2 -Betti number of residually finite groups*”, *Journal of Topology and Analysis* 3 (2), 153–160 (2011).
- [115] **Lück, W. and Ranicki, A.:** “*The surgery transfer*”, *Konferenzbericht der Göttinger Topologie Tagung 1987* (editor : tom Dieck), *Lecture Notes in Mathematics* 1361, 167 – 246, Springer (1988).
- [116] **Lück, W. and Ranicki, A. :** “*Chain homotopy projections*”, *Journal of Algebra* 120, 361 – 391 (1989).
- [117] **Lück, W. and Ranicki, A.:** “*Surgery obstructions of fibre bundles*”, *J. of Pure and Applied Algebra* 81, 139 – 189 (1992).
- [118] **Lück, W. and Reich, H.:** “*The Baum-Connes and the Farrell-Jones Conjectures*”, *Handbook of K -theory Volume 2*, editors: .M. Friedlander, D.R. Grayson, 703 – 842, Springer (2005).
- [119] **Lück, W. and Reich, H.:** “*Detecting K -theory by cyclic homology*”, *Proceedings of the LMS* 93, 593–634 (2006).
- [120] **Lück, W., Reich, H. and Schick, T.:** “*Novikov-Shubin invariants for arbitrary group actions and their positivity*”, in “*Tel Aviv Topology Conference: Rothenberg Festschrift*”, international conference on topology, June 1-5, 1998, Tel Aviv, *Contemporary Mathematics* 231, 159 – 176 (1999).
- [121] **Lück, W., Reich, H. and Varisco, M.:** “*Commuting smash products and homotopy limits*”, *K-theory* 30, 137–165 (2003).
- [122] **Lück, W., Reich, H. and Rognes, John and Varisco, M.:** “*Assembly maps for topological cyclic homology of group algebras*”, Preprint, arXiv:1607.03557 [math.KT], to appear in *Crelle* (2016).
- [123] **Lück, W., Reich, H. and Rognes, John and Varisco, M.:** “*Algebraic K -theory of integral group rings and topological cyclic homology*”, *Advances in Mathematics* 304, 930 - 1020 (2017).
- [124] **Lück, W. and Rørdam, M.:** “*Algebraic K -theory of von Neumann algebras*”, *K-theory* 7, 517 – 536 (1993).
- [125] **Lück, W. and Rosenberg, J.:** “*The equivariant Lefschetz fixed point theorem for proper cocompact G -manifolds*”, *Proceedings of the conference “Topology of high-dimensional manifolds”*, ICTP, June 2001, Trieste, 322–361, World Scientific (2003).
- [126] **Lück, W. and Rosenberg, J.:** “*Equivariant Euler characteristics and K -homology Euler classes for proper cocompact G -manifolds*”, *Geometry and Topology*, Volume 7 (2003) Paper no. 16, 569–613, <http://www.maths.warwick.ac.uk/gt/GTVol7/paper16.abs.html> (2003).

- [127] **Lück, W. and Rosenthal, D.:** *On the K - and L -theory of hyperbolic and virtually finitely generated abelian groups*, Forum Math. , 1565–1609 (2014).
- [128] **Lück, W. and Rothenberg, M.:** *“Reidemeister torsion and the K -theory of von Neumann algebras”*, K -theory 5, 213 – 264 (1991).
- [129] **Lück, W., Sauer, R. and Wegner, C.:** *“ L^2 -Torsion, the measure-theoretic determinant conjecture, and uniform measure equivalence”*, Journal of Topology and Analysis 2 (2), 145–171 (2010).
- [130] **Lück, W., Schick, T. and Thielmann, T.:** *“Torsion and fibrations”*, Crelle’s Journal für reine und angewandte Mathematik 498, 1 – 33 (1998).
- [131] **Lück, W. and Schick, T.:** *“ L^2 -torsion of hyperbolic manifolds of finite volume”*, GAFA 9, 518–567 (1999).
- [132] **Lück, W. and Schick, T.:** *“Various L^2 -signatures and a topological L^2 -signature theorem”*, Proceedings of the conference “Topology of high-dimensional manifolds”, June 2001, ICTP, Trieste, 362–399, World Scientific(2003).
- [133] **Lück, W. and Schick, T.:** *“Approximating L^2 -signatures by their compact analogues”*, Forum Math. 17, 31–65 (2005).
- [134] **Lück, W. and Stamm, R.:** *“Computations of K - and L -theory of co-compact planar groups”*, K -theory 21, 249 – 292 (2000).
- [135] **Lück, W. and Steimle, W.:** *“Delooping K -theory for additive categories”*, Proceedings of the Fourth Arolla Conference on Algebraic Topology 2012, *An Alpine Expedition through Algebraic Topology*, Contemporary Mathematics 617, 205–236 (2014).
- [136] **Lück, W. and Steimle, W.:** *“A twisted Bass-Heller-Swan decomposition for the non-connective K -theory of additive categories”*, Forum 28, 129–174 (2016).
- [137] **Lück, W. and Steimle, W.:** *“Splitting the relative assembly map, Nil-terms and involutions”*, Annals of K-theory 4 , 339–377 (2016).
- [138] **Lück, W. and Uribe, B.:** *“Equivariant principal bundles and their classifying spaces”*, AGT 14 (4), 1925-1995 (2014).
- [139] **Lück, W. and Weiermann, M.:** *“On the classifying space of the family of virtually cyclic subgroups”*, Pure and Applied Mathematics Quaterly volume 8, Number 2, (Special Issue: In honour of Thomas Farrell and Lowell E. Jones Part 2), 497 – 555 (2012).

Address

Wolfgang Lück

Mathematisches Institut

Rheinische Friedrich-Wilhelms-Universität Bonn

Endenicher Allee 60, 53115 Bonn, Germany

HIM (Hausdorff Institute for Mathematics)

Poppelsdorfer Allee 45, 53115 Bonn, Germany

email: wolfgang.lueck@him.uni-bonn.de

internet: <http://www.him.uni-bonn.de/lueck>