

Curriculum Vita

Peter A. Linnell

December 22, 2020

Name	Peter Arnold Linnell
Nationality	British (permanent resident of USA)
Sex	Male
Marital Status	Single
Address	Math Dept., Virginia Tech Blacksburg, VA 24061-1026. USA
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MathSciNet	http://www.ams.org/mathscinet/search/author.html?mrauthid=114455
arXiv	http://arxiv.org/a/linnell_p_1

Education/Employment Since Graduating

1975–1978	research student at Trinity Hall, Cambridge Ph.D. awarded October 1979
1978–1979	student at Dundee College of Education Teaching qualification secondary education, awarded June 1979
1979–81	research assistant at UMIST, Manchester
1981–82	visitor at UMIST (no salary)
1982–1983	research fellow at Girton College, Cambridge
1983–1984	Assistant professor at Virginia Tech
1984–1986	Humboldt fellow at Stuttgart University
1986–1988	Assistant professor at Virginia Tech (attended Representation Theory Symp., Manchester, March–July 1988)
1988–1992	Associate Professor at Virginia Tech
1991–1992	On leave at Essen University, with support from the Humboldt foundation and Deutsche Forschungsgemeinschaft
1992–present	Professor at Virginia Tech (1999–2000 on leave at Münster University)

Research Students

Michael J. Puls	<i>Analytic versions of the zero divisor conjecture</i> Ph.D. awarded May 1995
Mark S. Grinshpon	<i>Universal localization and group cohomology</i> Ph.D. awarded August 2006
Steven Hair	<i>New methods for finding non-left-orderable and unique product groups</i> , MSc. awarded December 2003
William P. Carter	<i>Non-unique product groups on two generators</i> MSc. awarded April 2007
Kelli M. Karcher	<i>The space of left orders on a group</i> MSc. awarded May 2011
Wade Mattox	<i>Homology of group von Neumann algebras</i> Ph.D. awarded July 2012
Camron Michael Withrow	<i>Left orderable residually finite p-groups</i> MSc. awarded January 2014
Samuel Vance Eastridge	<i>First l^2-cohomology groups</i> MSc. awarded June 2015
Amanda Renee Welch	<i>Characterizing zero divisors in group rings</i> MSc. awarded June 2015
Samuel Vance Eastridge	<i>First cohomology of some infinitely generated groups</i> Ph.D. awarded April 2017

Grants

NSA grant #091019 2011–2012, \$54855
NSA grant #H98230-13-1-0221 2013–2014, \$52473

Miscellaneous

Junior Berwick Prize received May 1987 (London Mathematical Society prize for research)

The Virginia Tech Regional Mathematics Contest, Math. Horizons 13 (Sep. 2005), p. 31.

Organizer of Virginia Tech Regional Math Contest since 2000.

The Atiyah conjecture for congruence subgroups, Oberwolfach Reports 3 (2006), 534–536.

Reviews: 159 for MathSciNet, 13 for Zentralblatt

Publications

- [1] Will Craig and Peter A. Linnell. Unique product groups and congruence subgroups. To appear in Journal of Algebra and Its Applications, arXiv:2003.04945, 2020.

- [2] Wolfgang Lück and Peter Linnell. Localization, Whitehead groups and the Atiyah conjecture. *Ann. K-Theory*, 3(1):33–53, 2018.
- [3] Peter A. Linnell, Michael J. Puls, and Ahmed Roman. Linear dependency of translations and square-integrable representations. *Banach J. Math. Anal.*, 11(4):945–962, 2017.
- [4] Anselm Knebusch, Peter Linnell, and Thomas Schick. On the center-valued Atiyah conjecture for L^2 -Betti numbers. *Doc. Math.*, 22:659–677, 2017.
- [5] Peter A. Linnell. The Atiyah conjecture. In *Geometry, topology, and dynamics in negative curvature*, volume 425 of *London Math. Soc. Lecture Note Ser.*, pages 198–220. Cambridge Univ. Press, Cambridge, 2016.
- [6] Peter Linnell and Dave Witte Morris. Amenable groups with a locally invariant order are locally indicable. *Groups Geom. Dyn.*, 8(2):467–478, 2014.
- [7] Nicolas Bergeron, Peter Linnell, Wolfgang Lück, and Roman Sauer. On the growth of Betti numbers in p -adic analytic towers. *Groups Geom. Dyn.*, 8(2):311–329, 2014.
- [8] Peter Linnell, Boris Okun, and Thomas Schick. The strong Atiyah conjecture for right-angled Artin and Coxeter groups. *Geom. Dedicata*, 158:261–266, 2012.
- [9] Mark S. Grinshpon, Peter A. Linnell, and Michael J. Puls. Dimensions of ℓ^p -cohomology groups. *Houston J. Math.*, 38(1):265–273, 2012.
- [10] Peter Linnell, Wolfgang Lück, and Roman Sauer. The limit of \mathbb{F}_p -Betti numbers of a tower of finite covers with amenable fundamental groups. *Proc. Amer. Math. Soc.*, 139(2):421–434, 2011.
- [11] Yago Antolín, Warren Dicks, and Peter A. Linnell. On the local-indicability Cohen-Lyndon theorem. *Glasg. Math. J.*, 53(3):637–656, 2011.
- [12] Peter A. Linnell. The space of left orders of a group is either finite or uncountable. *Bull. Lond. Math. Soc.*, 43(1):200–202, 2011.
- [13] Yago Antolín, Warren Dicks, and Peter A. Linnell. Non-orientable surface-plus-one-relation groups. *J. Algebra*, 326(1):4–33, 2011.
- [14] Peter A. Linnell and Thomas Schick. The Atiyah conjecture and Artinian rings. *Pure Appl. Math. Q.*, 8(2):313–327, 2012.
- [15] Peter H. Kropholler, Peter A. Linnell, and Wolfgang Lück. Groups of small homological dimension and the Atiyah conjecture. In *Geometric and Cohomological Methods in Group Theory*, volume 358 of *London Math. Soc. Lecture Note Ser.*, pages 272–277. Cambridge Univ. Press, Cambridge, 2009.
- [16] Peter A. Linnell, Akbar Rhemtulla, and Dale P. O. Rolfsen. Discretely ordered groups. *Algebra Number Theory*, 3(7):797–807, 2009.

- [17] Peter A. Linnell. Embedding group algebras into finite von Neumann regular rings. In Tomasz Brzeziniński, José Luis Gómez Pardo, Ivan Shestakov, and Patrick F. Smith, editors, *Proceedings of the International conference on Modules and Comodules dedicated to Robert Wisbauer*, pages 295–300. Birkhäuser, 2008.
- [18] Peter A. Linnell. ℓ^p -homology of one-relator groups. *Enseign. Math. (2)*, 54(1-2):141–143, 2008.
- [19] Karl W. Gruenberg and Peter A. Linnell. Generation gaps and abelianized defects of free products. *J. Group Theory*, 11(5):587–608, 2008.
- [20] Inga Blomer, Peter A. Linnell, and Thomas Schick. Galois cohomology of completed link groups. *Proc. Amer. Math. Soc.*, 136(10):3449–3459, 2008.
- [21] Peter A. Linnell, Akbar H. Rhemtulla, and Dale P. O. Rolfsen. Invariant group orderings and Galois conjugates. *J. Algebra*, 319(12):4891–4898, 2008.
- [22] Peter Linnell and Thomas Schick. Finite group extensions and the Atiyah conjecture. *J. Amer. Math. Soc.*, 20(4):1003–1051 (electronic), 2007.
- [23] Warren Dicks and Peter A. Linnell. L^2 -Betti numbers of one-relator groups. *Math. Ann.*, 337(4):855–874, 2007.
- [24] Daniel R. Farkas and Peter A. Linnell. Congruence subgroups and the Atiyah conjecture. In *Groups, Rings and Algebras*, volume 420 of *Contemp. Math.*, pages 89–102. Amer. Math. Soc., Providence, RI, 2006.
- [25] Peter A. Linnell, Gena Puninski, and Patrick Smith. Idempotent ideals and non-finitely generated projective modules over integral group rings of polycyclic-by-finite groups. *J. Algebra*, 305(2):845–858, 2006.
- [26] Peter A. Linnell. Noncommutative localization in group rings. In *Noncommutative localization in algebra and topology*, volume 330 of *London Math. Soc. Lecture Note Ser.*, pages 40–59. Cambridge Univ. Press, Cambridge, 2006.
- [27] Peter A. Linnell, Wolfgang Lück, and Thomas Schick. The Ore condition, affiliated operators, and the lamplighter group. In *High-dimensional manifold topology*, pages 315–321. World Sci. Publ., River Edge, NJ, 2003.
- [28] F. Thomas Farrell and Peter A. Linnell. Whitehead groups and the Bass conjecture. *Math. Ann.*, 326(4):723–757, 2003.
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