



CV of Malkhaz Bakuradze

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Education

1989	PhD	TSU, Supervisors R. Nadiradze, V. M. Buchstaber
1983	Diploma	TSU, Faculty of Mathematics and Mechanics
1978	State School	N 124, Tbilisi

Work Experience

TSU		
27/09/2018 -		Algebra and Geometry Department Head, Professor
01/10/2008 -2018		Associate Professor
A. Razmadze Math. Institute		
01/01/1995 -		Senior Researcher
01/10/1991-1995		Researcher
01/10/1989-1991		Junior Researcher

Visits

01/01/2004 - 01/01/2005	Univ. Montpellier-2, France, Visiting Professor
01/09/2002 - 28/02/2003	Max-Planck Institute of Math., Visiting Professor

Service

2015-	Editorial Board member of "Tbilisi Math. Journal"
2017-	Board member of TSU International PhD program in Mathematics

Research Interests

Algebraic Topology, Cobordism, K-theory, Morava K-theory, Characteristic classes, Explicit computations, Formal group laws and genera

PhD Students

Ana Nusxeladze	2017-
Natia gachechiladze	PhD, Nov. 2017
Goderdzi Pruidze	2013-2016

Grants

2017-2020	PICS Ref. 7736, PI
2016-2019	Shota Rustaveli NSF grant, Ref. 217-614, PI
2017-2020	Volkswagen Foundation, Inter. PhD program, Board member
2012-2014	Shota Rustaveli NSF grant, DI/16/5-103/12, Coordinator
2011-2013	Volkswagen Foundation, Ref.: I/84 328, Key Personnel
2009-2011	Volkswagen Foundation, Ref.: 85 989, Key Personnel
2009-2011	GNSF 08-671-3-103, Key Personnel
2006-2009	GNSF, ST06/3-004, Key Personnel
2006-2008	INTAS-South Caucasus, Key Personnel
2004-2007	INTAS, 03-51-3251, Key Personnel
2004-2005	NATO (OTAN FRANCE) Individual grant
2001-2003	GEM1 3330 TB-03; GRDF, Key Personnel
1999-2001	CRDF, GEM1-2083, Key Personnel
1995-1996	ISF, RVJ 200; ISF, RVJ 200, Key Personnel
1994-1995	ISF, RVJ 000; ISF, RVJ 000, Key Personnel

Some Conferences

2019 Seminar of Gumilev Inst. of Theoretical Mathematics and Computations, June 24, July 2
2019 Seminar of Algebra and Analysis, Romanovskiy Inst. of Math., Toshkent, March 4
2019 Séminaire Algèbre Géométrie Algébrique Topologie Algébrique,
Univ. Montpellier-2, France, Jan.
2019 Topology, Geometry, and Dynamics: Rokhlin – 100 August 19 - 23
The Euler Mathematical Institute, Saint Petersburg,
2019 Annual International Conference of Georgian Mathematical Union, Sept. 2-7
2018 IX International Conference of the Georgian Math. Union Sept. 3-8, Batumi
2017 Workshop in Manifolds and groups, Regensburg, Germany,
2017 Seminar in Algebra and Geometry,
A. Grothendick Inst. of Math., Montpellier, France
2017 Seminar of Math. Inst. Of the Univ. of Debrecen,
2016 Conference in differential and difference equations and applications, Lisabon
2014 Differential and Difference Equations and Applications,
2013 Algebraic Topology and Abelian Functions,
Conference in honour of V. Buchstaber on the occasion of his 70th birthday, Moscow
2012 Innt. Conference Stefan Banach 120, Lviv, Ukrain, Sept. 17-21
2011 15th NRW Topology Meeting
2011 International conference, Homotopy and Non-Commutative Geometry, Tbilisi
2010 Conference in K-theory, C*-algebras and Index Theory, Goettingen, Nov. 1-5
2009 Seminar in K-theory, Univ. Pariz 13
2008 International Conference on K-Theory and Homotopy
Santiago de Compostela (Spain), Sept. 15 - 19
2008 5-th European Congress of Mathematics, Amsterdam, July 14 - 18
2008 Abdus Salam School of Mathematical Sciences, GC University Lahore
2007 Postnikov memorial conference, Algebraic Topology old and New,
Stefan Banach Intern. Math. Center, Bedlewo, Poland, June 2007
2007 International Conference on Homology Theories, K-Theory and Homotopy Theory
Tbilisi May 28 - June 2
2006 International Congress of Mathematics, Madrid
2006 Topology week Univ. of Copenhagen, Sep. 26
2005 The Topology Meeting at the universities of Aberdeen and Manchester
2005 The 20th British Topology Meeting at the University of Bristol
2004 The International Conference on Geometric Topology and
Discrete Geometry, August, Moscow
2002 New Contexts for Stable Homotopy Theory; Sept. and Oct.
Isaac Newton Institute for Math. Sciences, Cambridge
2001 Northwestern University, Topology meeting, Nov. 19

Main Publications

- [bm1] Malkhaz Bakuradze, *On vanishing of all fourfold products of the Ray classes in symplectic cobordism*, Proc. Amer. Math. Soc., **148(9)** (2020), 4107-4115. ↑
- [bm2] ———, *All extensions of C_2 by $C_{2^{n+1}}$ are good*, Hiroshima Math. J. **50** (2020), 1-15. ↑
- [bm3] Malkhaz Bakuradze and Vladimir Vershinin, *On addition theorems related to elliptic integrals*, Proc. Steklov Math. Inst. **305** (2019), 22-32. ↑
- [bm4] ———, *On formal group laws over the quotients of Lazard's ring*, Georgian Math. J (April 9, Published Online: 2019), available at DOI:<https://doi.org/10.1515/gmj-2019-2022>. ↑

- [bm5] Malkhaz Bakuradze, *Polynomial behavior of the Honda formal group laws*, J. Homotopy Relat. Struct. **12(2)** (2017), 299-304, available at <https://link.springer.com/article/10.1007>. ↑
- [bm6] Malkhaz Bakuradze and Natia Gachechiladze, *Morava K-theory rings of the extensions of C_2 by the products of cyclic 2-groups*, Moscow Math. J. **16(4)** (2016), 141–193, available at <http://www.mathjournals.org/mmj/2016-016-004/2016-016-004-001.html>. ↑
- [bm7] Malkhaz Bakuradze, Alexander Gamkrelidze, and Joseph Gubeladze, *Affine Hom-complexes*, Port. Math. **73(2)** (2016), 183–205, available at [arXiv:1407.6870](https://arxiv.org/abs/1407.6870)[math.CO]. ↑
- [bm8] Malkhaz Bakuradze and Mamuka Jibladze, *Morava K-theory rings of groups G_{38}, \dots, G_{41} of order 32*, J. K-theory **13** (2014), 171–198. ↑
- [bm9] Malkhaz Bakuradze, *Computing the Krichever genus*, J. Homotopy Relat. Struct. **9(1)** (2014), 85–93, available at <https://link.springer.com/article/10.1007>. ↑
- [bm10] ———, *On the Buchstaber formal group law and some related genera*, Proc. Steklov Math. Inst. **286(1)** (2014), 7–21, available at <https://link.springer.com/article/10.1134>. ↑
- [bm11] ———, *Formal group laws by Buchstaber, Krichever and Nadiradze coincide*, Russian Math. Surv. **68**, **571** (2013). ↑
- [bm12] ———, *Induced representations, Transferred Chern classes and Morava rings $K(s)^*(BG)$: some calculations*, Proc. Steklov Math. Inst. **275** (2011), 160-168. ↑
- [bm13] Malkhaz Bakuradze and Mamuka Jibladze, *The rings $K(s)^*(BG)$ for the groups G_{38}, \dots, G_{41} of order 32*, Russian Math. Surv. **66(5)** (2011), 1003-1005. ↑
- [bm14] Malkhaz Bakuradze, *Mod 2 Morava K-theory for Frobenius complements of exponent dividing 2^{n-9}* , J. Homotopy Relat. Struct. **6(1)** (2011), 65-69. ↑
- [bm15] ———, *Morava K-theory rings for the modular groups in Chern classes*, K-theory **38(2)** (2008), 87-93. ↑
- [bm16] ———, *Morava K-theory rings for a quasi-dihedral group in Chern classes*, Proc. Steklov Math. Inst. **252** (2006), 23-29. ↑
- [bm17] ———, *Morava K-theory rings for the modular groups in Chern classes*, Russian Math. Surv. **61(3)** (2006). ↑
- [bm18] Malkhaz Bakuradze and Vladimir Vershinin, *Morava K-theory rings for the dihedral, semi-dihedral and generalized quaternion groups in Chern Classes*, Proc. Amer. Math. Soc. **134** (2006), 3707-3714. ↑
- [bm19] Malkhaz Bakuradze and Stewart Priddy, *Transferred Chern classes in Morava K-theory*, Proc. Amer. Math. Soc. **132** (2004), 1855-1860. ↑
- [bm20] Malkhaz Bakuradze and Vladimir Vershinin, *Characteristic classes and transfer relations in cobordism*, Proc. Amer. Math. Soc. **131(6)** (2003), 1935-1942. ↑
- [bm21] Malkhaz Bakuradze and Stewart Priddy, *Transfer and complex oriented cohomology rings*, Algebraic and Geometric Topology **3** (2003), 473-1509. ↑
- [bm22] M. Bakuradze, M. Jibladze, and V. Vershinin, *Characteristic classes and transfer relations in cobordism*, Russian Math. Surv. **156(3)** (2001), 72-74. ↑
- [bm23] M. Bakuradze, *On symplectic cobordism of real projective plane*, Pub. Math. Barc. **44(1)** (2000), 339-342. ↑
- [bm24] ———, *The transfer and symplectic cobordism*, Trans. Amer. Math. Soc. **349(11)** (1997), 4385-4399. ↑

Some other publications

- [bm25] Malkhaz Bakuradze, *Some 2-groups from the view pf Hilbert-Poincaré polynomials of $K(2)^*(BG)$* , Tbilisi Math. J. **10(2)** (2017), 103-110. ↑
- [bm26] Malkhaz Bakuradze and Mamuka Jibladze, *Some explicit expressions concerning BP*, Georgian Math. J. **23(2)** (2016), 157–167, available at [arXiv:1310.0783v3](https://arxiv.org/abs/1310.0783v3)[math.AT] ... ↑

- [bm27] Malkhaz Bakuradze, *Using formal group laws: some explicit calculations*, LAMBERT Academic Publishing, 2016, ISBN 978-3-659-96340-7. ↑
- [bm28] ———, *Morava K-theory rings of the extensions of C_p by the products of good groups under diagonal action*, Georgian Math. J. **22** (4) (2015), 451–455, available at [arXiv:1412.2274\[math.AT\]](https://arxiv.org/abs/1412.2274). ↑
- [bm29] ———, *Transferred characteristic classes and generalized cohomology rings*, J. Math. Sci. **189**(1) (2013), 10-75, available at <https://link.springer.com/article/10.1134>. ↑
- [bm30] Malkhaz Bakuradze and Mamuka Jibladze, *On the coefficient ring of the rational formal group law*, Proc. of A. Razmadze Math. Inst. **159** (2012), 1-9. ↑
- [bm31] Malkhaz Bakuradze, *The formal group law and transferred Chern classes in Morava K-theory*, Max-Plank-Institute preprint series **130** (2002). ↑
- [bm32] M. Bakuradze, *On the Buchstaber subring in MSp^** , Georgian Math. J. **5**(5) (1998), 401-414. ↑
- [bm33] ———, *Some calculations with transfer in symplectic cobordism*, Bull. Georgian Acad. of Sci. **2** (1996), 208-211. ↑
- [bm34] ———, *Some relations in symplectic cobordisms*, Proc. A. Razmadze Math. Inst. **104** (1994), 27-34. ↑
- [bm35] ———, *On transfer of coverings*, Proc. A. Razmadze Math. Inst. **94** (1991), 3-11. ↑
- [bm36] M. Bakuradze and Roin Nadiradze, *Cohomological realizations of two-valued formal groups and their applications*, Proc. A. Razmadze Math. Inst. **94** (1991), 12-28. ↑
- [bm37] M. Bakuradze, *transfer and characteristic classes in complex cobordism*, Bull. Georgian Acad. of Sci. **135**(1) (1989), 49-51. ↑
- [bm38] ———, *On transfer of coverings*, PhD, Moscow, Viniti **BY 6** (1988). ↑
- [bm39] M. Bakuradze and Roin Nadiradze, *Cohomological realizations of two-valued formal groups and their applications*, Bull. Georgian Acad. of Sci. **127**(4) (1987). ↑