

ALESSANDRO BERARDUCCI  
Curriculum, 2024

**Personal**

Born in Roma, Italy, 11th June, 1958. Nationality: Italian.  
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**Scientific interests**

Mathematical Logic, Model Theory,  $\omega$ -Minimality, Surreal numbers, Transseries, Models of Arithmetics, Modal Logic,  $\lambda$ -calculus, Topology.

**Education**

**1983** Laurea in Mathematics, Università di Roma “La Sapienza”, Advisor Corrado Böhm.  
**1983-84** 1st year of Graduate School of Mathematical Logic, Siena, Italy.  
**1989** Ph.D. in Mathematics, University of California at Berkeley. Advisor: Robert Solovay.

**Positions**

2001 - today	Full Professor	University of Pisa
1992 - 2001	Associate Professor	University of Pisa
1990-92	Researcher	University of L’Aquila
1984-89	TA, Associate, RA	Univ. of California at Berkeley

**Editorial activity**

2021-present	Editorial Board	Model Theory
2020-present	Editorial Board	Perspectives in Logic
2008-present	Editorial Board	Journal of Logic and Analysis
2013	Coordinating Editor	Journal of Symbolic Logic
2008-13	Editorial Board	Journal of Symbolic Logic
2007-08	Editorial Board	Logic and Analysis

**Research projects**

2019-22: PRIN 2017 “Mathematical Logic: models, sets, computability”, Principal investigator, start date 19/08/2019, duration 36 months, euro 516.500 MIUR +cofin 130.000.  
2014-17: Italian PRIN 2012, “Models and Sets”, Local coordinator.

2011-13: PRIN 2009 “Models and Sets”, Participant.  
 2008-10: PRIN 2007 “Model Theory, Set Theory and applications”.  
 2006-08. Part. to DGICYT (MTM2005-02865), Grupo español Geometría algebraica y analítica real.  
 2004-06: PRIN 2004 “Logical Methods in Algebra, Analysis and Geometry”.  
 2002-04: PRIN 2002 “Model Theory and Set Theory, their interactions and applications”.  
 1998-2000: PRIN 1998 “Teorie assiomatiche per i Fondamenti di Matematica, Informatica e altre scienze; modelli e applicazioni”.  
 2001, 1998. Part. to HI2000-0127 and HI19970122, Acción Hispano-Italiana of the Spanish Ministry of Science (DGES).

### Committees

2017	Organizer Mini-Workshop (id 1651c)	Oberwolfach 18-23 Dec. 2016
2015	Coordinator Logic session	XX Congresso UMI, Siena 7-12 Sett.
2011	Coordinator Logic session	XIX Congresso UMI, Bologna
2011	Program Committee	WoLLIC 2011, Univ. Pennsylvania
2008	Program Committee	Logic Colloquium 2008, Bern

### Grants

2015, Leverhulme Grant VP2-2013-055, Queen Mary Univ. London  
 1989, Research Grant, Ist. Naz. di Alta Matematica “F. Severi”

### Talks and scientific activities

**2022** Course on “Surreal numbers and transseries” 17 Jan.-9 Feb. (with Mantova). Part of the graduate course on “Transseries and Asymptotic Analysis”, Toronto, Fields Institute, 17 Jan.-6 April. <http://www.fields.utoronto.ca/activities/21-22/tame-transseries> (online).

**2021** Lag seminars, Università degli Studi di Urbino Carlo Bo, <http://www.sti.uniurb.it/molicabisci/LAGSeminars/>. Invited talk: “Exponential polynomials, Skolem’s problem and Conway’s surreal number”, 13 oct. 2021 (online).

**2021** Cross Alps Logic Seminar, Invited talk “Asymptotic analysis of Skolem’s exponential functions”, Torino 9 Apr. 2021 (online). <http://torino.logicgroup.altervista.org/torino/seminars.php?lng=eng>.

- 2021** University of Haifa, Colloquium talk “Surreal numbers and asymptotic analysis”, <https://mathematics.haifa.ac.il/?p=1991>, Haifa 6 April 2021 (online).
- 2021** Géométrie et Théorie des Modèles (année 2020-21). Paris, 15 Jan. 2021. Invited seminar “An application of surreal numbers to the asymptotic analysis of certain exponential functions” (online). <http://gtm.imj-prg.fr/archives2021.html>.
- 2019** XXI Congresso dell’Unione Matematica Italiana Pavia, 2-7 Settembre 2019. Plenary conference “Surreal numbers and transseries” (6 Sept.). <https://umi.dm.unibo.it/congresso2019/>.
- 2018** Incontro Italiano Insiemi e Modelli 2018, 21-23 Feb. Torino. Invited talk “Homotopy, dimension and hyperdefinability” <http://logicatorino.altervista.org/workshop210218/index.php>
- 2018** Mini-course on “Surreal models of the real exponential fields”, Paris, Institute Henri Poincaré, 6 and 8 Feb. <http://modvac18.math.ens.fr/courses.html>
- 2017** Contributed talk on “Surreal differential calculus and transseries”, XXI incontro AILA, Padova, Orto Botanico, 25-28 Sept. <https://events.math.unipd.it/aila2017/node/3>
- 2017** Invited Speaker at the conference “Model Theory and applications to geometry”, Padova 13-15 Sett., title of talk “On the dimension of bounded hyperdefinable sets”. <https://events.math.unipd.it/mtg2017/node/3>
- 2017** Seminar at the “Summer School di Matematica del progetto Diderot”, Progetto AlphaClass2017, Osservatorio Astronomico di Saint Barthélemy, Nus (AO), 11 Sept.
- 2017** Plenary talk “Surreal differential calculus”, Logic Colloquium 2017, August 14-20, Stockholm. <https://www.math-stockholm.se/konferenser-och-akti/logic-in-stockholm-2/logic-colloquium-2017/logic-colloquium-2017-august-14-20-1.717648>
- 2017** Seminar on “Surreal differential calculus and transseries”, Department of Mathematics, Oxford, 26 July.
- 2017** Invited talk at “Kolloquien und Oberseminare, Fachbereich Mathematik und Statistik, Konstanz”, 6 Feb.. Title of talk “Arithmetic interpretation of the exp-algebraic integers”.

[https://www.mathematik.uni-konstanz.de/forschung/kolloquien-und-oberseminare/kolloquien-detail/2017/2/6/event/24169-Arithmetical-interpretat/tx\\_cal\\_phpicalendar/](https://www.mathematik.uni-konstanz.de/forschung/kolloquien-und-oberseminare/kolloquien-detail/2017/2/6/event/24169-Arithmetical-interpretat/tx_cal_phpicalendar/)

- 2016** Co-organizer of the Mini-Workshop: Surreal Numbers, Surreal Analysis, Hahn Fields and Derivations, Oberwolfach, December 18-23. Talk on “Transseries as germs of surreal functions”, [https://www.mfo.de/occasion/1651c/www\\_view](https://www.mfo.de/occasion/1651c/www_view)
- 2016** Invited talk “On the topology of hyperdefinable sets”, Thematic program in model theory, International conference, June 20-24, Notre Dame, IN. <https://www3.nd.edu/~cmd/programs/cmd2016/conference/index.html>
- 2016** Invited talk “The surreal numbers as a differential field: is there a better derivation?”, Workshop on Model Theory: From Fields to Hardy Fields, Fields Institute, Toronto, August 2-6, 2016. <http://www.fields.utoronto.ca/activities/16-17/hardy>
- 2016** invited talk “Transserial derivations on surreal numbers”, special session on Surreal Numbers, AMS-MAA Joint Mathematical Meetings, January 6-9, Seattle. [http://jointmathematicsmeetings.org/meetings/national/jmm2016/2181\\_program\\_ss16.html#title](http://jointmathematicsmeetings.org/meetings/national/jmm2016/2181_program_ss16.html#title)
- 2015** Invited talk: “Compact domination, o-minimal homotopy and Pillay’s conjecture”, Lancashire Yorkshire Model Theory Seminar, 7th meeting, Dec 5th, Preston. <http://personalpages.manchester.ac.uk/staff/Marcus.Tressl/events/LYMoTS.php>
- 2015** LTCC intensive course (8 hours): “Logic meets topology: model theory, o-minimality, definable groups”. 3-4 June, London Taught Course Center, University College London. <http://www.ltcc.ac.uk/intensives/past-intensives/2014-2015-intensive-courses/>
- 2015** Leverhulme Lecture: “Ordered differential fields, Logarithmic-exponential power series and Conway’s surreal numbers”, 1 June, University of East Anglia, Pure Maths Research Seminars, <https://www.uea.ac.uk/mathematics/news-and-events/pure-seminars>
- 2015** Leverhulme Lecture: “Groups and Spaces in the o-minimal category”, 21 Apr. Queen Mary Univ. London, Geometry and Analysis Seminar, <http://www.maths.qmul.ac.uk/seminars/groups-and-spaces-o-minimal-category>

- 2015** Leverhulme Lecture: “Topology of abelian groups in the o-minimal category”, 30 March, Queen Mary University of London, School of Mathematical Sciences
- 2015** Invited talk “Hardy type derivations on the surreal numbers”, 19 Feb. University of Oxford, Mathematical Institute, Logic Seminar, <https://www.maths.ox.ac.uk/node/13708>
- 2015** Leverhulme Lecture: “Conway’s surreal numbers and Transseries”. 17 Feb., Queen Mary University of London, School of Mathematical Sciences
- 2015** Invited talk, “Hardy Fields, Surreal Numbers, Derivations”. University of Leeds, Department of Pure Mathematics, Logic Seminar, 4 Jan., <https://www1.maths.leeds.ac.uk/pure/logic/seminar.html>
- 2015** Invited talk, Surreal derivations. Logic seminar, University of Manchester, School of Mathematics, 28 Jan., <http://www.maths.manchester.ac.uk/our-research/events/seminars/logic/surreal-derivations.htm>
- 2014** 25 hours Course on “Model theory” at the Scuola Normale Superiore, Pisa, 3 March - 12 May.
- 2013** Pisa, Seminario di Algebra, Topologia e Combinatoria, Talk “Covers of definable groups”, 21 Oct.
- 2013** Madrid. Talk at the Joint UAM-ICMAT Seminar “Algebra and Combinatorics”, Sept. 13.
- 2013** Oberwolfach. Talk at the workshop “Model Theory: Groups, Geometry, and Combinatorics”, 6-12 Jan.
- 2012** Lyon. Visit 17-25 April. Talk at the “Séminaires et Groupes de travail Mathématiques”.
- 2012** Oxford, Math. Inst. Invited talk “Discrete subgroups of locally definable groups”, Logic Seminar, 2 Feb.
- 2011** Münster, Inst. Math. Logik. Talk “Locally definable groups in o-minimal structures”, 8 Dec.
- 2011** Oléron (France). Participation to the conference “Recent Developments in Model Theory”, June 5-11.
- 2011** Paris, École Normale Supérieure. Talk at the seminar “Géométrie et Théorie des Modèles”, May 6.
- 2010** Gödel Centre of the University of Wien, 14-18 June. Invited professor.

- 2010** Oberwolfach. Talk at the workshop “Model Theory: Around Valued Fields and Dependent Theories”, Jan. 3-9.
- 2009** Leuven. 2nd Belgian Math. Soc. - London Math. Soc. Invited talk at the logic session.
- 2009** Durham. Talk at the LMS Symposium “New Directions in the Model Theory of Fields”, July 20-30.
- 2009** Lisbon. Research center CMAF, 10-16 March. Visit and seminar.
- 2007** Perugia. International Meeting UMI - DMV, June 18-22. Invited speaker at the session “model theory and applications”.
- 2006** Leeds. Meeting “Around o-minimality”, March 11-13. Invited talk.
- 2005** Bristol. Invited speaker at the British Logic Colloquium, Sept. 1-3.
- 2005** Lyon. Invited speaker at the “Colloquium on o-minimality”, March 21-23.
- 2005** Pisa. Coorganizer of the XXII Incontro AILA, 10-13 Feb.
- 2004** Torino. Plenary speaker at the Logic Colloquium 2004.
- 2004** Oberwolfach. Participation to the workshop “Model Theory and Complex Analytic Geometry”, July 18-24.
- 2004** Pisa. Contributed talk at the meeting: “Models of Arithmetic and Analysis”, June 25-26. Title: Definable groups in o-minimal structures”.
- 2004** Banff Centre, Alberta. Tutorial on o-minimality at the BIRS Workshop “Interactions between model theory and geometry”, March 13-18.
- 2003** Udine. Talk on “On the field of real numbers with the exponential function”, 12 Dec.
- 2003** Paris. Talk on “Effective o-minimality of the real exponential field and related structures” within the “Séminaire général de Logique”, 23 June.
- 2003** Lyon, Claude Bernard University Lyon 1. Talk on “Effective o-minimality of the real exponential field 12 June 2003.
- 2003** Paris, Participation to the “Rencontre Internationale de Théorie des Modèles”, Institut Henri Poincaré, June 6-7.
- 2003** Cesenatico. Talk on “Assiomatica della Geometria Elementare e dei Numeri Reali”, XIX Edizione nazionale delle Olimpiadi di matematica, May 9-11.

- 2002** Ravello (Italy). Participation to the “Euro-Conference in Model Theory and Applications”, May 27 - June 1.
- 2001** Pontignano (Siena, Italy). XXI meeting of Mathematical Logic, 30 Oct.-3 Nov. 2001. Contributed talk on “Some results and problems on definable sets in o-minimal structures”.
- 2001** Viareggio, 18° Convegno sulla didattica della matematica, Collegio Colombo, 6-7-8 Sept. Conference on “Questioni di decidibilità nell’ambito della geometria elementare”.
- 2000** 6th Barcellona logic meeting, July 5–8. Talk on “o-minimal fundamental group, homology, and manifolds”.
- 1999** 5th Barcellona logic meeting, June 16-19. Talk on “Intersection theory for o-minimal manifolds”.
- 1999** Udine, XIX Incontro di Logica, 6-9 Oct. Conference on: “Euler characteristic of o-minimal manifolds and groups”.
- 1998 (Jan. - June)** Berkeley. On leave at the “Mathematical Science Research Institute”. Special semester in model theory. Talk on “Factorization in transfinite power series”, Feb. 1998.
- 1997** Perugia. Contributed talk at the GNSAGA meeting, Nov. 6–8.
- 1996** Donostia-San Sebastian. Tutorial on Models of Arithmetics at the Logic colloquium’96, July 9-15.
- 1995** Firenze. Contributed talk at the “10-th International Congress of Logic, Methodology and Philosophy of Science”, Aug. 1995.
- 1994-95** Siena. Doctorate course on lambda calculus at the Department of Mathematics.
- 1994** Copenhagen. Cycle of lectures on lambda calculus at the Summer School “Folli” of the European community, Aug. 1994.
- 1994** Wien. Conference at the meeting “Proof Theory, Complexity, Metamathematics”, April 5-8.
- 1993** Keele, England. Logic Colloquium (ASL), July 20 - 29. Contributed Talk.
- 1991 (Sept. - Dec.)** Oxford, Department of Mathematics. Invitation by A. Wilkie.
- 1991** Amsterdam. Talk at the Department of Mathematics, Jan 23. Invitation by D. De Jongh.

- 1990** Cortona. Invited lectures at the INDAM meeting “Metodi effettivi in algebra e logica”, Oct. 8–12.
- 1990** Luminy, Marseille. Talk at the CIRM Conference “Logic and Computer Science”, June 25-29.
- 1990** San Diego, California. Talk at the Workshop on “Proof Theory, Arithmetic and Complexity”. June 18–22.
- 1990 (Jan.-Mar.)** Oxford, Department of Mathematics. Invitation by A. Macintyre.
- 1989** Roma. Dipartimento di Matematica G. Castelnuovo. Invitation by C. Bernardi. Talk Dec. 7.
- 1989** Kosice. Talk at the Conference “Foundations of Logic and Computer Science”. Sept. 4–6.
- 1989** Berlin. ASL Logic Colloquium, July 25 – Aug 1. Contributed talk.

### Doctoral and postdoctoral students

D. Pitteloud (postdoctoral work 1998-99), T. Servi (doct. SNS 2007), A. Fornasiero (postdoc Pisa 2003-07), A. Conversano (doct. Siena 2009), M. Mamino (doct. SNS 2010), V. Mantova (doct. SNS 2013), Panteleimon Eleftheriou (PRIN postdoc 2020-21), Rosario Mennuni (postdoc 2021–2024), Francesco Gallinaro (postdoc 2024).

### Publications

- [51] A. Berarducci and M. Mamino. *Provability logic: models within models in peano arithmetic* Bollettino dell’Unione Matematica Italiana (Published 07 May 2022), 16: 25–41 (2023) doi:10.1007/s40574-022-00325-9
- [50] A. Berarducci and M. Mamino. *Orthogonal decomposition of definable groups*. Journal of Symbolic Logic (Published online 01 August 2023), 89(3): 1158-1179 (2024) doi:10.1017/jsl.2023.56
- [49] A. Berarducci and P. Freni. *On the value group of the transseries*. Pacific Journal of Mathematics, 312 (2): 335-354 (2021). doi:10.2140/pjm.2021.312.335
- [48] A. Berarducci and M. Mamino. *Asymptotic Analysis of Skolem’s exponential functions*. The Journal of Symbolic Logic (Published online 4 Sept. 2020), 87(2): 758–782 (June2022) doi:10.1017/jsl.2020.26

- [47] A. Berarducci and V. Mantova. *Transseries as germs of surreal functions*. Transactions of the American Mathematical Society, 751 (5): 3549-3592 (2019) doi:10.1090/tran/7428
- [46] A. Berarducci and V. Mantova. *Surreal numbers, derivations and transseries*. Journal of the European Mathematical Society, 20: 339-390 (2018). doi:10.4171/JEMS/769
- [45] A. Berarducci, P. Ehrlich, S. Kuhlmann. *Mini-Workshop: Surreal Numbers, Surreal Analysis, Hahn Fields and Derivations, Report 60/2016*. Introduction by the organizers. Oberwolfach Reports, 13 (4): 3313-3372 (2017). doi:10.4171/OWR/2016/60
- [44] A. Berarducci and C. Toffalori. *Le direzioni della logica in italia: la teoria dei modelli*. In H. Hosni, G. Lolli; C. Toffalori, eds., *Le Direzioni della Ricerca Logica in Italia*, 43-83. Scuola Normale Superiore, Pisa, crm series edn. (2015).
- [43] A. Berarducci and M. Mamino. *Groups definable in two orthogonal sorts*. Israel Journal of Mathematics, 208(1): 413-441 (2015). doi:10.1007/s11856-015-1205-5 arXiv:1304.1380, 1–18 (2013)
- [42] E. Baro and A. Berarducci. *Topology of definable abelian groups in o-minimal structures*. Bulletin of the London Mathematical Society, 44(3):473–479 (2012). doi:10.1112/blms/bdr108
- [41] A. Berarducci, M. J. Edmundo, and M. Mamino. *Discrete subgroups of locally definable groups*. Selecta Mathematica, 19(3): 719-736 (2013). doi:10.1007/s00029-013-0123-9
- [40] A. Berarducci, P. Majer, and M. Novaga. *Infinite paths and cliques in random graphs*. Fundamenta Mathematicae, 216(2):163–191 (2012). doi:10.4064/fm216-2-6
- [39] A. Berarducci. *La verità matematica da Kant a Gödel*. In I. Gabbani, editor, *Matematica, cultura e società' 2007-2008*, 231–254. Scuola Normale Superiore, Pisa, crm series edn. (2011). ISBN 978-88-7642-382-6
- [38] A. Berarducci and M. Mamino. *On the homotopy type of definable groups in an o-minimal structure*. Journal of the London Mathematical Society, 83(3):563–586 (2011). doi:10.1112/jlms/jdq080
- [37] A. Berarducci, M. Mamino, and M. Otero. *Higher homotopy of groups definable in o-minimal structures*. Israel Journal of Mathematics, 180(1):143–161 (2010). doi:10.1007/s11856-010-0098-6

- [36] A. Berarducci, Y. Peterzil, and A. Pillay. *Group covers, o-minimality, and categoricity*. *Confluentes Mathematici*, 02(04):473–496 (2010). doi:10.1142/S1793744210000259
- [35] A. Berarducci. *Cohomology of groups in o-minimal structures: acyclicity of the infinitesimal subgroup*. *Journal of Symbolic Logic*, 74(3):891–900 (2009). doi:10.2178/jsl/1245158089
- [34] A. Berarducci, D. Dikranjan, and J. Pelant. *Products of straight spaces*. *Topology and its Applications*, 156(7):1422–1437 (2009). doi:10.1016/j.topol.2008.12.024
- [33] A. Berarducci and A. Fornasiero. *O-Minimal cohomology: Finiteness and invariance results*. *Journal of Mathematical Logic*, 09(02):167–182 (2009). doi:10.1142/S0219061309000859
- [32] A. Berarducci. *O-minimal spectra, infinitesimal subgroups and cohomology*. *Journal of Symbolic Logic*, 72(4):1177–1193 (2007). doi:10.2178/jsl/1203350779
- [31] A. Berarducci, M. J. Edmundo, and M. Otero. *Corrigendum to: “Transfer methods for o-minimal topology”*. *Journal of Symbolic Logic*, 72(3):1079–1080 (2007). doi:10.2178/jsl/1191333858
- [30] A. Berarducci, D. Dikranjan, and J. Pelant. *Local connectedness and extension of uniformly continuous functions*. *Topology and its Applications*, 153(17):3355–3371 (2006). doi:10.1016/j.topol.2005.04.016
- [29] A. Berarducci. *Zero-groups and maximal tori*. In D. Z. EDITORS A. ANDRETTA, K. KEARNES, editor, *Lecture Notes in Logic, 29 Logic Colloquium 2004*, 33–45 (2005). ISBN 9780521884242
- [28] A. Berarducci, D. Dikranjan, and J. Pelant. *An additivity theorem for uniformly continuous functions*. *Topology and its Applications*, 146–147:339–352 (2005). doi:10.1016/j.topol.2003.05.007
- [27] A. Berarducci, M. Otero, Y. Peterzil, and A. Pillay. *A descending chain condition for groups definable in o-minimal structures*. *Annals of Pure and Applied Logic*, 134(2-3):303–313 (2005). doi:10.1016/j.apal.2005.01.002
- [26] A. Berarducci and M. Otero. *An additive measure in o-minimal expansions of fields*. *The Quarterly Journal of Mathematics*, 55(4):411–419 (2004). doi:10.1093/qmath/hah010
- [25] A. Berarducci and T. Servi. *An effective version of Wilkie’s theorem of the complement and some effective o-minimality re-*

- sults*. *Annals of Pure and Applied Logic*, 125(1-3):43–74 (2004). doi:10.1016/j.apal.2003.08.001
- [24] A. Berarducci and M. Otero. *Transfer methods for o-minimal topology*. *Journal of Symbolic Logic*, 68(3):785–794 (2003). doi:10.2178/jsl/1058448438
- [23] A. Berarducci, D. Dikranjan, and J. Pelant. *Functions with distant fibers and uniform continuity*. *Topology and its Applications*, 121(1-2):3–23 (2002). doi:10.1016/S0166-8641(01)00105-5
- [22] A. Berarducci, D. Dikranjan, and J. Pelant. *Uniform quasi components, thin spaces and compact separation*. *Topology and its Applications*, 122(1-2):51–64 (2002). doi:10.1016/S0166-8641(01)00132-8
- [21] A. Berarducci and M. Otero. *o-Minimal Fundamental Group, Homology and Manifolds*. *Journal of the London Mathematical Society*, 65(2):257–270 (2002). doi:10.1112/S0024610701003015
- [20] A. Berarducci and C. Böhm. *Rewriting Techniques and Applications*, vol. 2051 of *Lecture Notes in Computer Science*. Springer Berlin Heidelberg, Berlin, Heidelberg (2001). ISBN 978-3-540-42117-7, 15–30 . doi:10.1007/3-540-45127-7
- [19] A. Berarducci and M. Otero. *Intersection theory for o-minimal manifolds*. *Annals of Pure and Applied Logic*, 107(1-3):87–119 (2001). doi:10.1016/S0168-0072(00)00027-0
- [18] A. Berarducci. *Factorization in generalized power series*. *Transactions of the American Mathematical Society*, 352(2):553–577 (1999). doi:10.1090/S0002-9947-99-02172-8
- [17] A. Berarducci and M. Dezani-Ciancaglini. *Infinite  $\lambda$ -calculus and types*. *Theoretical Computer Science*, 212(1-2):29–75 (1999). doi:10.1016/S0304-3975(98)00135-2
- [16] A. Berarducci and B. Intrigila. *Linear recursive relations are  $\Delta_0$ -definable*. In A. CANTINI, E. CASARI, and P. MINARI, editors, *Logic and foundations of mathematics*, 67–81. Kluwer Academic Publisher (1999). ISBN 9780792356592
- [15] A. Berarducci, D. Dikranjan, M. Forti, and S. Watson. *Cardinal invariants and independence results in the poset of precompact group topologies*. *Journal of Pure and Applied Algebra*, 126(1-3):19–49 (1998). doi:10.1016/S0022-4049(96)00149-1

- [14] A. Berarducci. *Infinite lambda-calculus and non-sensible models*. In A. Ursini and P. Aglianò, editors, *LOGIC AND ALGEBRA, Lecture Notes in Pure and Applied Mathematics Series/180*, 339–378. Marcel Dekker, Inc. (1996). ISBN 9780824796068
- [13] A. Berarducci and B. Intrigila. *Church-Rosser lambda-theories, Infinite lambda-terms and consistency problems*. In W. Hodges, M. Hyland, C. Steinhorn, and J. Truss, editors, *Logic: from Foundations to Applications*, chap. 2, 33–58 (1996). ISBN 0 19 853862 6
- [12] A. Berarducci and M. Otero. *A Recursive Nonstandard Model of Normal Open Induction*. *The Journal of Symbolic Logic*, 61(4):1228–1241 (1996)
- [11] A. Berarducci and P. D’Aquino.  $\Delta_0$ -complexity of the relation  $y = \Pi_{i \leq n} F(i)$ . *Annals of Pure and Applied Logic*, 75(1-2):49–56 (1995). doi:10.1016/0168-0072(94)00055-8
- [10] A. Berarducci and C. Böhm. *A self interpreter of lambda-calculus having a normal form*. In E. Börger, G. Jäger, H. Kleine Büning, S. Martini, and M. M. Richter, editors, *Computer Science Logic: 6th Workshop, CSL’92, San Miniato, Italy, September 28 - October 2, 1992. Selected Papers*, vol. 702 of *Lecture Notes in Computer Science*, 85–99. Springer Berlin Heidelberg, Berlin, Heidelberg (1993). ISBN 978-3-540-56992-3. doi:10.1007/3-540-56992-8
- [9] A. Berarducci and D. Dikranjan. *Uniformly approachable functions and spaces*. *Rendiconti dell’Istituto di Matematica dell’Università di Trieste. An International Journal of Mathematics*, 25:23–53 (1993)
- [8] A. Berarducci and B. Intrigila. *On the cop number of a graph*. *Advances in Applied Mathematics*, 14:389–403 (1993). doi:10.1006/aama.1993.1019
- [7] A. Berarducci and B. Intrigila. *Some new results on easy lambda-terms*. *Theoretical Computer Science*, 121(1-2):71–88 (1993). doi:10.1016/0304-3975(93)90084-7
- [6] A. Berarducci and R. Verbrugge. *On the provability logic of bounded arithmetic*. *Annals of Pure and Applied Logic*, 61(1-2):75–93 (1993). doi:10.1016/0168-0072(93)90199-N
- [5] A. Berarducci and M. V. Zilli. *Generalizations of Unification*. *Journal of Symbolic Computation*, 16(5):479–491 (1993). doi:10.1006/jSCO.1993.1059

- [4] A. Berarducci and B. Intrigila. *Combinatorial principles in elementary number theory*. Annals of Pure and Applied Logic, 55(1):35–50 (1991). doi:10.1016/0168-0072(91)90096-5
- [3] A. Berarducci. *The Interpretability Logic of Peano Arithmetic*. Journal of Symbolic Logic, 55(3):1059–1089 (1990)
- [2] A. Berarducci.  $\Sigma_0^n$ -interpretations of modal logic. Bollettino U.M.I., 7(3-A):177–184 (1989)
- [1] C. Böhm and A. Berarducci. *Automatic synthesis of typed  $\Lambda$ -programs on term algebras*. Theoretical Computer Science, 39:135–154 (1985). doi:10.1016/0304-3975(85)90135-5