

CURRICULUM VITAE

1. PERSONAL DATA

Name: Anna
Surname: Giordano Bruno
Nationality: Italian
Place and date of birth: San Vito al Tagliamento, 13 December 1980
Address: via G. Pascoli, 1 - 33078 San Vito al Tagliamento PN
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2. LANGUAGES

Italian: mother tongue.
English: good spoken and written.

3. EDUCATION

Ph.D. in Mathematics obtained on 14 February 2008 at University of Udine.
Title of the thesis: *Cardinal invariants of topological groups and applications to κ -pseudocompact groups*.
Advisor: Prof. Dikran Dikranjan.

Laurea in Mathematics obtained on 18 March 2004 at University of Udine.
Title of the thesis: *Gruppi pseudocompatti estremali*.
Advisor: Prof. Dikran Dikranjan.

4. POSITION

2011–present: Researcher at University of Udine.
2011: Post-doc student with a grant by INdAM (Istituto Nazionale di Alta Matematica).
2009–2010: Post-doc student at University of Padova; title of the project: “Algebraic entropy”.
2005–2008: Ph.D. student at University of Udine.

5. PUBLICATIONS

5.1. Future publications.

- [1] D. Dikranjan, A. Giordano Bruno, *Entropy on abelian groups*, preprint. arXiv:1007.0533
- [2] A. Giordano Bruno, *Topological entropy for automorphisms of totally disconnected locally compact groups*, submitted.
- [3] D. Dikranjan, A. Giordano Bruno, L. Salce, S. Virili, *Intrinsic algebraic entropy*, submitted.

5.2. Published.

- [4] A. Giordano Bruno, S. Virili, *Algebraic Yuzvinski Formula*, J. Algebra, to appear.
- [5] D. Dikranjan, A. Giordano Bruno, *A factorization theorem for topological abelian groups*, Comm. Algebra, to appear.
- [6] D. Dikranjan, A. Giordano Bruno, *The Bridge Theorem for totally disconnected LCA groups*, Topology Appl. (2014) doi:10.1016/j.topol.2014.02.029.
- [7] D. Dikranjan, A. Giordano Bruno, *Topological groups with a dense free abelian subgroup*, Rend. Istit. Mat. Univ. Trieste 45 (2013) 137–150.
- [8] D. Dikranjan, A. Giordano Bruno, L. Salce, S. Virili, *Fully inert subgroups*, J. Group Theory 16 (2013) 915–939.
- [9] F. Berlai, D. Dikranjan, A. Giordano Bruno, *Scale function vs Topological entropy*, Topology Appl. 160 (18) (2013) 2314–2334.
- [10] D. Dikranjan, A. Giordano Bruno, *Discrete dynamical systems in group theory*, Note Mat. 33 (1) (2013) 1–48.
- [11] D. Dikranjan, A. Giordano Bruno, *Entropy in a category*, Appl. Categ. Structures 21 (1) (2013) 67–101.
- [12] A. Giordano Bruno, *Adjoint entropy vs Topological entropy*, Topology Appl. 159 (9) (2012) 2404–2419.
- [13] D. Dikranjan, A. Giordano Bruno, *Limit free computation of entropy*, Rend. Istit. Mat. Univ. Trieste 44 (2012) 297–312.
- [14] D. Dikranjan, A. Giordano Bruno, *The connection between topological and algebraic entropy*, Topology Appl. 159 (13) (2012) 2980–2989.
- [15] A. Giordano Bruno, L. Salce, *A soft introduction to algebraic entropy*, Arabian J. Math. 1 (1) (2012) 69–87.
- [16] A. Giordano Bruno, S. Virili, *String numbers of abelian groups*, J. Algebra Appl. 11 (4) (2012) 125–161.
- [17] D. Dikranjan, A. Giordano Bruno, *The Pinsker subgroup of an algebraic flow*, J. Pure Appl. Algebra 216 (2) (2012) 364–376.

- [18] Dikranjan, A. Giordano Bruno, *Topological entropy and algebraic entropy for group endomorphisms*, Proceedings ICTA2011 Islamabad, Pakistan July 4-10 2011 Cambridge Scientific Publishers 133–214.
- [19] D. Dikranjan, A. Giordano Bruno, *Functorial topologies and finite-index subgroups of abelian groups*, Topol. Appl. 158 (17) (2011) 2391–2407.
- [20] D. Dikranjan, A. Giordano Bruno, S. Virili, *Strings of group endomorphisms*, J. Algebra Appl. 9 (6) (2010) 933–958.
- [21] D. Dikranjan, A. Giordano Bruno, L. Salce, *Adjoint algebraic entropy*, J. Algebra 324 (3) (2010) 442–463.
- [22] A. Giordano Bruno, *Algebraic entropy of shift endomorphisms on products*, Comm. Algebra 38 (11) (2010) 4155–4174.
- [23] M. Akhavin, F. Ayatollah Zadeh Shirazi, D. Dikranjan, A. Giordano Bruno, A. Hosseini, *Algebraic entropy of shift endomorphisms on abelian groups*, Quaest. Math. 32 (4) (2009) 529–550.
- [24] D. Dikranjan, A. Giordano Bruno, D. Shakhmatov, *Minimal pseudocompact group topologies on free abelian groups*, Topology Appl. 156 (12) (2009) 2039–2053.
- [25] A. Giordano Bruno, *Extremal α -pseudocompact abelian groups*, Forum Math. 21 (4) (2009) 639–659.
- [26] D. Dikranjan, A. Giordano Bruno, *Arnautov’s problems on semitopological isomorphisms*, Appl. Gen. Topol. 10 (1) (2009) 85–119.
- [27] A. Giordano Bruno, *Semitopological homomorphisms*, Rend. Semin. Mat. Univ. Padova 120 (2008) 79–126.
- [28] A. Giordano Bruno, *Dense minimal pseudocompact subgroups of compact abelian groups*, Topology Appl. 155 (2008) 1919–1928.
- [29] D. Dikranjan, A. Giordano Bruno, *w-Divisible groups*, Topology Appl. 155 (4) (2008) 252–272.
- [30] D. Dikranjan, A. Giordano Bruno, *Pseudocompact totally dense subgroups*, Proc. Amer. Math. Soc. 136 (3) (2008) 1093–1103.
- [31] D. Dikranjan, A. Giordano Bruno, C. Milan, *Weakly metrizable pseudocompact groups*, Appl. Gen. Topol. 7 (1) (2006) 1–39.

6. CONFERENCES

6.1. Future conferences.

- (1) First Joint International Meeting RSME-SCM-SEMA-SIMAI-UMI - Bilbao (Spain), 30 June - 4 July 2014; Plenary talk in the special session “Algebraic Entropy and Topological Entropy”: *Bridge Theorems*.
- (2) Algebraic Structures and Their Applications - Spineto (Italy), 16-20 June 2014.

6.2. Given communications.

- (1) 28th Summer Conference on Topology and its Applications - Nipissing University, Northbay (Canada), 23-26 July 2013; Talk: *Topological entropy for automorphisms of totally disconnected locally compact groups*.
- (2) Groups and Topological Groups Conference 2013 - Milan (Italy), 25-26 January 2013; Talk: *Limit free computation of topological entropy*.
- (3) ItEs 2012 - Eighth Italian-Spanish Conference on General Topology and its Applications - Trieste (Italy), 3-7 September 2012; Talk: *Entropy on totally disconnected locally compact groups*.
- (4) Ischia Group Theory 2012 - Ischia (Italy), 23-26 March 2012; Poster (jointly with Pablo Spiga): *Algebraic entropy and growth of group endomorphisms*.
- (5) 11st Prague Topological Symposium - Prague (Czech Republic), 8-12 August 2011; Talk: *The Bridge Theorem*.
- (6) Seminario Padova - Verona MALGA (moduli, algebre, anelli) from February 2009; Talk on 10/05/2011: *Entropy on abelian groups*.
- (7) Algebra meets Topology: Advances and Applications - Barcellona (Spain), 19-23 July 2010; Short talk: *Entropy functions*.
- (8) Incontro Nazionale di Algebra Moderna (INdAM) - Roma (Italy), 24-28 May 2010; 40’ Talk: *Algebraic entropy for abelian groups*.
- (9) Groups and Topological Groups Conference 2010 - Essen (Germany), 29-30 January 2010; Talk: *Algebraic entropy for non-torsion abelian groups*.
- (10) Seminario Padova - Verona MALGA (moduli, algebre, anelli) from February 2009; Talk on 10/12/2009: *Algebraic entropy of generalized shifts*.
- (11) Workshop on Commutative Rings and Their Modules - Bressanone (Italy), 17-20 September 2007; Talk: *w-Divisible groups*.
- (12) ItEs 2007 - Sixth Italian-Spanish Conference General Topology and its Applications - Bressanone (Italy), 26-29 June 2007; Talk: *Small minimal dense subgroups of compact abelian groups*.
- (13) 10th Prague Topological Symposium - Prague (Czech Republic), 13-19 August 2006; Poster: *Dense minimal subgroups of compact abelian groups*.
- (14) 2006 International Conference on Topology and its Applications - Aegion (Greece), 23-26 June 2006; Short talk: *Semitopological homomorphisms*.

- (15) International Workshop on Topological Groups - Pamplona (Spain), 31 August - 02 September 2005;
Talk: *Totally dense pseudocompact subgroups*.

6.3. Given seminars abroad.

- (1) Seminar at University of Firenze, 19 October 2012;
Title of the seminar: *Algebraic entropy*.
(2) Seminar at University of Bologna, 22 September 2010;
Title of the seminar: *Algebraic entropy*.

6.4. Other conferences attended.

- (1) Locally compact groups beyond Lie Theory - Spa (Belgium), 1-5 April 2013.
(2) Una giornata per Silvia. Conferenza in memoria di Silvia Lucido - Padova (Italy), 26-27 March 2010.
(3) Workshop on Dynamical Systems - Udine (Italy), 27-28 September 2007.

7. PARTICIPATION TO RESEARCH PROJECTS

- (1) Member of the project "Progetti di Eccellenza 2011/12" of Fondazione CARIPARO, University of Padova.
(2) Member of PRIN 2008; national project *Anelli commutativi e loro moduli, gruppi abeliani e applicazioni*, coordinator Prof. Luigi Salce; local project at University of Padova *Moduli su domini d'integrità, gruppi abeliani topologici ed entropia algebrica*.
(3) Member of Progetto di ricerca scientifica ex 60% 2009 *Moduli su anelli commutativi e entropia algebrica*, University of Padova.
(4) Member of PRIN 2005; *Commutative rings and their modules: multiplicative ideal theory, homological and topological methods*, national coordinator Prof. Luigi Salce.

8. REFEREE ACTIVITY

- (1) Referee for Journal of Pure and Applied Algebra, Topology and its Applications, Rendiconti del Seminario Matematico dell'Università di Padova.
(2) Reviewer for Zentralblatt MATH.

9. TEACHING ACTIVITY

Courses taught at the University of Udine:

- (1) 2013–14: Algebra 2.
(2) 2012–13: Algebra 1.
(3) 2011–12, 2012–13, 2013–14: Discrete Mathematics (exercises).
(4) 2003–2009: exercises for several courses (Arithmetic, Algebra, Discrete Mathematics, Geometry, Analysis).

10. THESIS SUPERVISED

- (1) Giulia Ruzzene, *Il teorema ponte tra entropia algebrica e topologica*, University of Udine (2013).
(2) Luisa Gallovich, *Entropia algebrica per spazi vettoriali*, University of Udine (2012).
(3) Federico Berlai, *Sulla funzione scala di Willis*, Master Thesis, University of Udine (2011) (co-supervisor: D. Dikranjan).