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Europass Curriculum Vitae

Personal information

NAME AND SURNAME	Beatrice Santa Palano
POSITION	Associate Professor in Computer Science (disciplinary area INF/01)
STUDIES APPLIED FOR	PhD in Computer Science

Work experience

From 08/2019	Associate Professor at the "Dipartimento di Informatica Giovanni Degli Antoni", University of Milan
In 2019	She wins a competition (art.18, comma 1, Legge 30.12.2010 n. 240) for a position of Associate Professor for the disciplinary area INF/01
In 2017	She gets the National Scientific Qualification as Associate Professor for the disciplinary area INF/01
From 10/2014 to 02/2015	She benefits of obligatory maternity leave
From 12/2005	She is confirmed in the position of university researcher at the Computer Science Dipartement – today "Dipartimento di Informatica Giovanni Degli Antoni", University of Milan
From 12/2002	She is a university researcher at the Computer Science Dipartement, University of Milan
In 11/2002	She wins a competition for a position of university researcher in INF/01
From 10/2002 to 12/2002	She gets a temporary research position at the Computer Science Dipartement, University of Milan. Topic: "Quantum automata: strength and weakness of computation, and applications ", supervisor: Prof. A. Bertoni
In 07/2002	She wins a competition for a research grant (Assegno di Ricerca) at the Computer Science Dipartement, University of Milan

Main activities

- She carries out research activities in Theoretical Computer Science both with academics at an international level and with undergraduate and PhD students in Computer Science. In particular, the following fields are covered:
  - Quantum computing, study of the computational and descriptional power of different models of quantum automata, physical realization
  - Descriptional complexity, study of the succinctness of different type of automata and grammars for formal languages
  - Descriptive complexity, study of the expressive power of fragments of first order logic for classes of formal languages
  - Parallel complexity, study of efficient parallel algorithms on different computational models (e.g., boolean and threshold circuits)
  - Distributed algorithms, study algorithms for systems of autonomous agents (swarm of robots)
- She teaches BSc and MSc courses in Computer Science at the University of Milan

Type of business or sector: Research/Teaching in Computer Science

Education and training

At the end of 2002	She receives the PhD in Computer Science with final evaluation excellent, with a thesis entitled: "Synthesis of unary quantum automata from periodic events"
From 1998 to 2002	She participates to the XIV Cycle of the PhD Program in Computer Science at the Computer Science Department, University of Turin
In 1998	She wins the competition for admission to the XIV Cycle of the PhD Program in Computer Science (4 years) at the University of Turin

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In 1998

She receives a MSc degree cum laude in Computer Science at the University of Milan, with a thesis entitled: "Language recognition by constant depth threshold circuits"

Skills acquired

She gets research experience in different fields of Theoretical Computer Science.

Organisational/managerial skills

- She is the PRINCIPAL INVESTIGATOR of the international project "Reducing Complexity by Introducing Structure" admitted to financing on the basis of a competitive contest within the program Ateneo Italo-Tedesco "Programma Vigoni", CRUI-DAAD: Conferenza dei Rettori delle Università Italiane-Deutscher Akademisher Austausch Dienst., Years: 2007-2008
- She is a member of the editorial board of the journal "International Journal of Natural Computing Research" (DOI: 10.4018/IJNCR). Years: from 2010. Website: http://www.igiglobal.com/journal/international-journal-natural-computing-research/1148.
- She is a member of the organizing committee of the International Workshop on Non-Classical Models of Automata and Applications, year: 2011. Conference website: http://www.informatik.uni-giessen.de/ncma2011
- She is a member of the organizing committee of the International Workshop on Descriptional Complexity of Formal Systems, Como, Italia, 2005. Conference website: http://dcfs05.dico.unimi.it
- She is a member of the organizing committee of the School on Quantum Computing, Vietri sul Mare, Italia. Sponsored by: Capitolo Italiano dell'EATCS, European Educational Forum and IIASS. Year: 2000.

International collaborations

- International collaborations:
  - International collaborations documented by scientific publications with a research group in France: head Prof. Christian Choffrut – L.I.A.F.A., Universitè Paris VII, Paris, France. Years: form 2006.
  - International collaborations documented by scientific publications with a research group in Germany: heads Proff. M. Holzer, M. Kutrib, A. Malcher. Institut fur Informatik, Johann Wolfgang Goethe-Universitat/J.L. Universitat, Frankfurt am Main/Giessen, Germany. Years: from 2007.
  - International collaborations documented by scientific publications with a research group in Slovakia: head Prof. V. Geffert, Department of Computer Science, P. J. Safarik University, Kosice, Slovakia. Years: from 2008.
  - International collaborations documented by scientific publications with a research group in Switzerland: head Prof. J. Hromkovic. ETH Zurich, Zurich, Switzerland. Years: from 2015.
- Italian collaborations:
  - Collaboration with Prof. Matteo Paris and Prof. Stefano Olivares of "Applied Quantum Mechanics Group - Quantum Technology Lab" Physics Department, Università degli Studi di Milano, aiming to provide physical implementations of finite memory quantum devices by photonic technology.
  - Collaboration with Prof. Paola Flocchini, School of Electrical Engineering and Computer Science, University of Ottawa, Ontario, Canada, in the area of distributed algorithm design for models of computation based on cooperating agents (robot swarms) aiming to perform typical practical tasks such as environmental exploration and guarding, pattern formation.

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Additional information

Publications

– **Publications on international journals:**

1. M. Kutrib, A. Malcher, C. Mereghetti, B. Palano, P. Raucci, M. Wendlandt. Deterministic pushdown automata with translucent input letters. In *Information and Computation*. In press.
2. C. Feletti, L. Mambretti, C. Mereghetti, B. Palano. Computational power of autonomous robots: transparency vs. opaqueness. In *Theoretical Computer Science*, 1036:115153, 2025.
   DOI: https://doi.org/10.1016/j.tcs.2025.115153
3. C. Mereghetti, B. Palano, P. Raucci. Latvian quantum finite state automata for unary languages. In *International Journal of Foundations of Computer Science*, 36:419-455, 2025.
   DOI: https://doi.org/10.1142/S0129054124430032
4. C. Mereghetti, B. Palano, P. Raucci. Unary quantum finite state automata with control language. In *Applied Sciences*, 14:1490, 2024.
   DOI: https://doi.org/10.3390/app14041490
5. M. Kutrib, A. Malcher, C. Mereghetti, B. Palano. Iterated uniform finite-state transducers: descriptional complexity of nondeterminism and two-way motion. In *Journal of Automata Languages and Combinatorics*, 28(1-3):59-88, 2023.
   DOI: https://doi.org/10.25596/jalc-2023-059
6. M. Kutrib, A. Malcher, C. Mereghetti, B. Palano. Iterated uniform finite-state transducers on unary languages. In *Theoretical Computer Science*, 969:114049, 2023.
   DOI: https://doi.org/10.1016/j.tcs.2023.114049
7. C. Feletti, C. Mereghetti, B. Palano. Uniform circle formation for fully, semi-, and asynchronous opaque robots with lights. In *Applied Sciences*, 13(13):7991, 2023.
   DOI: https://doi.org/10.3390/app13137991
8. M. Kutrib, A. Malcher, C. Mereghetti, B. Palano. Computational and descriptional power of nondeterministic iterated Uniform finite-state transducers. In *Fundamenta Informaticae*, 185(4) : 337-356, 2022.
   DOI: https://doi.org/10.3233/FI-222113
9. M. Kutrib, A. Malcher, C. Mereghetti, B. Palano. Descriptional complexity of iterated uniform finite-state transducers. In *Information and Computation*, 284:104691, 2022.
   DOI: https://doi.org/10.1016/j.ic.2021.104691
10. C. Mereghetti, B. Palano. Guest Column: Quantum Finite Automata: From Theory to Practice. SIGACT News, 52(3):38-59, 2021.
    DOI: https://doi.org/10.1145/3494656.3494666
11. A. Candeloro, C. Mereghetti, B. Palano, S. Cialdi, M.G.A. Paris, S. Olivares. An enhanced photonic quantum finite automaton. In *Applied Sciences*, 11(18):8768, 2021.
    DOI: https://doi.org/10.3390/app11188768
12. S. Jakobi, K. Meckel, C. Mereghetti, B. Palano. The descriptional power of queue automata of constant length. In *Acta Informatica*, 58:335–356, 2021.
    DOI: https://doi.org/10.1007/s00236-021-00398-7
13. C. Mereghetti, B. Palano, S. Cialdi, V. Vento, M.G.A. Paris, S. Olivares. Photonic realization of a quantum finite automaton. In *Physical Review Research*, 2(1), 013089, 2020.
    DOI: https://doi.org/10.1103/PhysRevResearch.2.013089
14. M.P. Bianchi, H.J. Böckenhauer, T. Brülisauer, D. Komm, B. Palano. Online minimum spanning tree with advice. In *International Journal of Foundations of Computer Science*, 505–527, vol. 29, 2018.
    DOI: https://doi.org/10.1142/S0129054118410034

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15. Z. Bednárová, V. Geffert, C. Mereghetti, B. Palano. Boolean language operations on nondeterministic automata with a pushdown of constant height. In *Journal of Computer and System Science*, 90:99–114, 2017.

    DOI: https://doi.org/10.1016/j.jcss.2017.06.007

16. M.P. Bianchi, C. Mereghetti, B. Palano. Quantum finite automata: Advances on Bertoni's ideas. In *Theoretical Computer Science*, 664:39–53, 2017.

    DOI: https://doi.org/10.1016/j.tcs.2016.01.045

17. M.P. Bianchi, C. Mereghetti, B. Palano. On the power of one-way automata with quantum and classical states. In *International Journal of Foundations of Computer Science*, 26:895–912, 2015.

    DOI: https://doi.org/10.1142/S0129054115400055

18. M. Kutrib, A. Malcher, C. Mereghetti, B. Palano, M. Wendlandt. Deterministic Input-Driven Queue Automata: Finite Turns, Decidability, and Closure Properties. In *Theoretical Computer Science*, 578:58–71, 2015.

    DOI: https://doi.org/10.1016/j.tcs.2015.01.012

19. M.P. Bianchi, C. Mereghetti, B. Palano. Size Lower Bounds for Quantum Automata. In *Theoretical Computer Science*, 551:102–115, 2014.

    DOI: https://doi.org/10.1016/j.tcs.2014.07.004

20. Z. Bednárová, V. Geffert, C. Mereghetti, B. Palano. Removing nondeterminism in constant height pushdown automata. In *Information and Computation*, 237:257–267, 2014.

    DOI: https://doi.org/10.1016/j.ic.2014.03.002

21. M. P. Bianchi, C. Mereghetti, B. Palano, G. Pighizzini, M. Holzer, S. Jakobi. On Inverse Operations and Their Descriptional Complexity. In *Journal of Automata, Languages and Combinatorics*, 17:61–81, 2012.

    DOI: https://doi.org/10.25596/jalc-2012-061

22. A. Malcher, K. Meckel, C. Mereghetti, B. Palano. Descriptional Complexity of Pushdown Store Languages. In *Journal of Automata, Languages and Combinatorics*, 17:225–244, 2012.

    DOI: https://doi.org/10.25596/jalc-2012-225

23. Z. Bednárová, V. Geffert, C. Mereghetti, B. Palano. The size-cost of Boolean operations on constant height deterministic pushdown automata. In *Theoretical Computer Science*, 449:23–36, 2012.

    DOI: https://doi.org/10.1016/j.tcs.2012.05.009

24. A. Malcher, C. Mereghetti, B. Palano. Descriptional complexity of two-way pushdown automata with restricted head reversals. In *Theoretical Computer Science*, 449:119–133, 2012.

    DOI: https://doi.org/10.1016/j.tcs.2012.04.007

25. C. Choffrut, A. Malcher, C. Mereghetti, B. Palano. First-order logics: some characterizations and closure properties. In *Acta Informatica*, 49:225–248, 2012.

    DOI: https://doi.org/10.1007/s00236-012-0157-z

26. M. P. Bianchi, C. Mereghetti, B. Palano, G. Pighizzini. On the Size of Unary Probabilistic and Nondeterministic Automata. In *Fundamenta Informaticae*, 112:119–135, 2011.

    DOI: https://doi.org/10.3233/FI-2011-583

27. M. P. Bianchi, B. Palano. Behaviours of unary quantum automata. In *Fundamenta Informaticae*, 104:1–15, 2010.

    DOI: https://dx.doi.org/10.3233/FI-2010-333

28. A. Malcher, C. Mereghetti, B. Palano. Sublinearly space bounded iterative arrays. In *International Journal of Foundations of Computer Science*, 21:843–858, 2010.

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29. A. Bertoni, C. Mereghetti, B. Palano. Trace monoids with idempotent generators and measure-only quantum automata. In *Natural Computing*, 9:383–395, 2010.

DOI: https://doi.org/10.1007/s11047-009-9154-8

30. V. Geffert, C. Mereghetti, B. Palano. More concise representation of regular languages by automata and regular expressions. In *Information and Computation*, 208:385–394, 2010.

DOI: https://doi.org/10.1016/j.ic.2010.01.002

31. B. Palano. A regularity condition for context-free grammars. In *International Journal of Foundations of Computer Science*, pp. 845–857, vol. 19, 2008.

DOI: https://doi.org/10.1142/S0129054108005991

32. C. Mereghetti, B. Palano. Quantum automata for some multiperiodic languages. In *Theoretical Computer Science*, pp. 177–186, vol. 387, 2007.

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33. C. Mereghetti, B. Palano. Quantum finite automata with control language. In *Theoretical Informatics and Applications*, pp. 315–332, vol. 40, 2006.

DOI: https://doi.org/10.1051/ita:2006007

34. A. Bertoni, C. Mereghetti, B. Palano. Some formal tools for analyzing quantum automata. In *Theoretical Computer Science*, pp. 14–25, vol. 356, 2006.

DOI: https://doi.org/10.1016/j.tcs.2006.01.042

35. C. Mereghetti, B. Palano. The complexity of minimum difference cover. In *Journal of Discrete Algorithms*, pp. 239–254, vol. 4, 2006.

DOI: https://doi.org/10.1016/j.jda.2005.03.004

36. A. Bertoni, C. Mereghetti, B. Palano. Small size quantum automata recognizing some regular languages. In *Theoretical Computer Science*, pp. 394–407, vol. 340, 2005.

DOI: https://doi.org/10.1016/j.tcs.2005.03.032

37. A. Bertoni, C. Mereghetti, B. Palano. Golomb rulers and difference sets for succinct quantum automata. In *International Journal of Foundations of Computer Science*, pp. 871–888, vol. 14, 2003.

DOI: https://doi.org/10.1142/S0129054103002060

38. C. Mereghetti, B. Palano. On the size of one-way quantum finite automata with periodic behaviors. In *Theoretical Informatics and Applications*, pp. 277–291, vol. 36, 2002.

DOI: https://doi.org/10.1051/ita:2002014

39. C. Mereghetti, B. Palano. The parallel complexity of deterministic and probabilistic automata. In *Journal of Automata, Languages and Combinatorics,* pp. 95–108. vol. 7, 2002.

DOI: https://doi.org/10.25596/jalc-2002-095

40. C. Mereghetti, B. Palano, G. Pighizzini. Note on the succinctness of deterministic, nondeterministic, probabilistic and quantum finite automata. In *Theoretical Informatics and Applications*, pp. 477–490, vol. 35, 2001.

DOI: https://doi.org/10.1051/ita:2001106

41. C. Mereghetti, B. Palano. Threshold circuits for iterated matrix product and powering. In *Theoretical Informatics and Applications*, pp. 39–46, vol. 34, 2000.

DOI: https://doi.org/10.1051/ita:2000105

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– **Publications on international conference proceedings:**

1. M. Kutrib, A. Malcher, C. Mereghetti, B. Palano. Two-way finite automata with translucent input letters. In 26th International Conference on Descriptional Complexity of Formal Systems (DCFS'25), Proceedings, Lecture Notes in Computer Science 15759, pp. 151-165, Springer, 2025.

   DOI: https://doi.org/10.1007/978-3-031-97100-6_11

2. M. Kutrib, A. Malcher, C. Mereghetti, B. Palano, P. Raucci, M. Wendlandt. On properties of languages accepted by deterministic pushdown automata with translucent input letters. In 28th International Conference on Implementation and Application of Automata (CIAA '24), Proceedings, Lecture Notes in Computer Science 15015, pp. 208-220, Springer, 2024.

   DOI: https://doi.org/10.1007/978-3-031-71112-1_15

3. M. Kutrib, A. Malcher, C. Mereghetti, B. Palano, P. Raucci, M. Wendlandt. Deterministic pushdown automata with translucent input letters. In 28th International Conference Developments in Language Theory (DLT '24), Proceedings, Lecture Notes in Computer Science 14791, pp. 203-217, Springer, 2024.

   DOI: https://doi.org/10.1007/978-3-031-66159-4_15

4. C. Feletti, L. Mambretti, C. Mereghetti, B. Palano. Computational power of opaque robots. In 3rd International Symposium on Algorithmic Foundations of Dynamic Networks (SAND '24), Proceedings, Eds. A. Casteigts, F. Kuhn, Leibniz International Proceedings in Informatics (LIPIcs) 292, pp. 13:1-13:19, Schloss Dagstuhl - Leibniz-Zentrum für Informatik, 2024.

   DOI: https://doi.org/10.4230/LIPIcs.SAND.2024.13

5. C. Feletti, C. Mereghetti, B. Palano. O(log n)-time uniform circle formation for asynchronous opaque luminous robots. In 27th International Conference on Principles of Distributed Systems (OPODIS '23), Proceedings, Eds. A. Bessani, X. D'efago, J. Nakamura, K. Wada, Y. Yamauchi, Leibniz International Proceedings in Informatics (LIPIcs) 286, pp. 5:1-5:21, Schloss Dagstuhl - LeibnizZentrum für Informatik, 2023.

   DOI: https://doi.org/10.4230/LIPIcs.OPODIS.2023.5

6. C. Mereghetti, B. Palano, P. Raucci. Latvian quantum finite state automata for unary languages. In 13th International Workshop on Non-classical models of automata and applications (NCMA '23), Proceedings, Eds. R. Freund, B. Nagy, Electronic Proceedings in Theoretical Computer Science (EPTCS) 388, pp. 63-78, EPTCS.org, 2023.

   DOI: https://doi.org/10.4204/EPTCS.388.8

7. C. Feletti, C. Mereghetti, B. Palano, P. Raucci. Uniform circle formation for fully, semi-, and asynchronous opaque robots with lights. In 23rd Italian Conference on Theoretical Computer Science (ICTCS '22), CEUR WORKSHOP PROCEEDINGS, pp. 207-221, CEUR-WS.org 2022.

   ISSN: 1613-0073, URL: https://ceur-ws.org/Vol-3284/8511.pdf

8. M. Kutrib, A. Malcher, C. Mereghetti, B. Palano. Iterated transduction on unary languages. In 22nd Italian Conference on Theoretical Computer Science (ICTCS '21), CEUR WORKSHOP PROCEEDINGS, pp. 87-92, CEUR-WS.org 2022.

   ISSN: 1613-0073, URL: https://ceur-ws.org/Vol-3072/paper7.pdf

9. M. Kutrib, A. Malcher, C. Mereghetti, B. Palano. Iterated uniform finite-state transducers on unary languages In 47th International Conference on Current Trends in Theory and Practice of Computer Science (SOFSEM '21). LNCS 12607, pp. 218–232, Springer 2021.

   DOI: https://doi.org/10.1007/978-3-030-67731-2_16

10. M. Kutrib, A. Malcher, C. Mereghetti, B. Palano. Deterministic and nondeterministic iterated uniform finite-state transducers: computational and descriptional power. In 16th International Conference Computability in Europe 2020 (CiE 2020). LNCS 12098, pp. 87–99, Springer 2020.

    DOI: https://doi.org/10.1007/978-3-030-51466-2_8

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11. M. Kutrib, A. Malcher, C. Mereghetti, B. Palano. Iterated uniform finite-state transducers. In 20th Italian Conference on Theoretical Computer Science (ICTCS 2019), Proceedings, Eds. A. Cherubini, N. Sabadini, S. Tini, CEUR WORKSHOP PROCEEDINGS 2504, pp. 52–57, CEUR-WS.org 2019.

    ISSN: 1613-0073, URL: https://ceur-ws.org/Vol-2504/paper6.pdf

12. M. Kutrib, A. Malcher, C. Mereghetti, B. Palano. Descriptional complexity of iterated uniform finite-state transducers In 21th International Workshop on Descriptional Complexity of Formal Systems (DCFS 2019), LNCS 11612, pp. 223–234, High Tatras, Slovakia, 2019.

    DOI: https://doi.org/10.1007/978-3-030-23247-4_17

13. C. Feletti, C. Mereghetti, B. Palano. Uniform Circle Formation for Swarms of Opaque Robots with Lights. In 20th International Symposium on Stabilization, Safety, and Security of Distributed Systems (SSS 2018). LNCS 11201, pp. 317–332. Tokyo, Japan, 2018.

    DOI: https://doi.org/10.1007/978-3-030-03232-6_21

14. M.P. Bianchi, H.J. Boeckenhauer, T. Bruelisauer, D. Komm, B. Palano. Online Minimum Spanning Tree with Advice. In 42nd International Conference on Current Trends in Theory and Practice of Computer Science (SOFSEM 2016). LNCS 9587, pp. 195–207. Harrachov, Czech Republic, 2016.

    DOI: https://dx.doi.org/10.1007/978-3-662-49192-8_16

15. M.P. Bianchi, C. Mereghetti, B. Palano. On the power of one-way finite automata with quantum and classical states. In 19th International Conference on Implementation of Automata and Applications (CIAA 2014). LNCS 8587, pp. 84–97. Giessen, Germany, 2014.

    DOI: https://doi.org/10.1007/978-3-319-08846-4_6

16. V. Geffert, A. Malcher, K. Meckel, C. Mereghetti, B. Palano. A direct construction of finite automata for pushdown store languages. In 15th Workshop on Descriptional Complexity of Formal Systems (DCFS 2013), LNCS 8031, pp. 90–101. London, Ontario, Canada, 2013.

    DOI: https://doi.org/10.1007/978-3-642-39310-5_10

17. S. Jakobi, K. Meckel, C. Mereghetti, B. Palano. Queue automata of constant length. In 15th Workshop on Descriptional Complexity of Formal Systems (DCFS 2013), LNCS 8031, pp. 124–135. London, Ontario, Canada, 2013.

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18. M. Kutrib, A. Malcher, C. Mereghetti, B. Palano, M. Wendlandt. Input-Driven Queue Automata: Finite Turns, Decidability, and Closure Properties. In 18th International Conference on Implementation and Application of Automata (CIAA 2013), LNCS 7982, pp. 232–243. Halifax, Nova Scotia, Canada, 2013.

    DOI: https://doi.org/10.1007/978-3-642-39274-0_21

19. M.P. Bianchi, C. Mereghetti, B. Palano. Size lower bounds for quantum automata. In 11th International Conference on Unconventional Computation and Natural Computation (UCNC 2013), LNCS 7956, pp. 19–30. Milano, Italy, 2013.

    DOI: https://doi.org/10.1007/978-3-642-39074-6_4

20. Z. Bednárová, V. Geffert, C. Mereghetti, B. Palano. Boolean Language Operations on Nondeterministic Automata with a Pushdown of Constant Height. In 8th International Computer Science Symposium in Russia (CSR 2013), LNCS 7913, pp. 100–111. Ekaterinburg, Russia, 2013.

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21. A. Malcher, K. Meckel, C. Mereghetti, B. Palano. On pushdown store languages. In 13th Italian Conference on Theoretical Computer Science 2012 (ICTCS 2012), pp. 168–171. Varese, Italy, 2012.

22. A. Malcher, K. Meckel, C. Mereghetti, B. Palano. Descriptional complexity of pushdown store languages. In 14th International Workshop on Descriptional Complexity of Formal Systems (DCFS 2012), LNCS 7386, pp. 209–221. Braga, Portugal, 2012.

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23. Z. Bednárová, V. Geffert, C. Mereghetti, B. Palano. Removing nondeterminism in constant height pushdown automata. In 14th International Workshop on Descriptional Complexity of Formal Systems (DCFS 2012), LNCS 7386, pp. 76–88. Braga, Portugal, 2012.

DOI: https://doi.org/10.1007/978-3-642-31623-4_6

24. A. Malcher, C. Mereghetti, B. Palano. Descriptional complexity of Two-Way Pushdown Automata With Restricted Head Reversals. In 13th International Workshop on Descriptional Complexity of Formal Systems (DCFS 2011), LNCS 6808, pp. 248–260. Vicinity of Giessen, Germany, 2011.

DOI: https://doi.org/10.1007/978-3-642-22600-7_20

25. Z. Bednárová, V. Geffert, C. Mereghetti, B. Palano. The Size-Cost of Boolean Operations on Constant Height Deterministic Pushdown Automata. In 13th International Workshop on Descriptional Complexity of Formal Systems (DCFS 2011), LNCS 6808, pp. 80–92. Vicinity of Giessen, Germany, 2011.

DOI: https://doi.org/10.1007/978-3-642-22600-7_7

26. M. P. Bianchi, C. Mereghetti, B. Palano, G. Pighizzini. Probabilistic vs. Nondeterministic Unary Automata. In Second International Workshop on Non-Classical Models of Automata and Applications (NCMA 2010), pp. 33–44. Jena, Germany, 2010.

ISBN: 9783854032564

27. C. Choffrut, A. Malcher, C. Mereghetti, B. Palano. On the Expressive Power of FO[+]. In 4th International Conference on Language and Automata Theory and Application (LATA 2010), LNCS 6031, pp. 190–201. Trier, Germany, 2010.

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28. A. Malcher, C. Mereghetti, B. Palano. Logical description of Structured and XML languages. In 11th Italian Conference on Theoretical Computer Science (ICTCS 2009), pp. 161–167. Cremona, Italy, 2009.

29. M. P. Bianchi, B. Palano. Events and Languages on Unary Quantum Automata. In First International Workshop on Non-Classical Models of Automata and Applications (NCMA 2009), pp. 61–75. Wroclaw, Poland, 2009.

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30. V. Geffert, C. Mereghetti, B. Palano. Descriptional Complexity Issues Concerning Regular Languages. In 18th Workshop on Theorietag Automaten und Formale Sprachen, pp. 11–22. Giessen, Germany, 2008.

ISBN: 9783000259203

31. V. Geffert, C. Mereghetti, B. Palano. More concise representation of regular languages by automata and regular expressions. In 12th International Conference on Developments in Language Theory (DLT 2008), LNCS 5257, pp. 349–360. Kyoto, Japan, 2008.

DOI: https://doi.org/10.1007/978-3-540-85780-8_28

32. M. P. Bianchi, B. Palano. On leftmost #-rewriting systems, 2008. In 10th International Workshop on Descriptional Complexity of Formal Systems (DCFS 2008), pp. 61–72. Charlottetown, Canada, 2008.

ISBN 978-0-919013-56-8

33. A. Malcher, C. Mereghetti, B. Palano. Sublinearly space bounded iterative arrays. In 12th International Conference on Automata and Formal Languages (AFL 2008), pp. 292–301. Balatonfüred, Hungary, 2008.

ISBN: 9789633113677

34. A. Malcher, C. Mereghetti, B. Palano. Recent results on iterative arrays with small space bounds. In EPSRC Workshop on Cellular Automata Theory and Applications (AUTOMATA 2008), pp. 222–226. Bristol, United Kingdom, 2008.

ISBN: 9781905986163

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35. B. Palano. A regularity condition for context-free grammars. In 9th International Workshop on Descriptional Complexity of Formal Systems (DCFS 2007), pp. 117–128. High Tatras, Slovakia, 2007.

    ISBN: 9788070976883

36. C. Mereghetti, B. Palano. Quantum automata for some multiperiodic languages. In 8th International Workshop on Descriptional Complexity of Formal Systems (DCFS 2006), pp. 199–210. Las Cruces, New Mexico, USA, 2006.

37. A. Bertoni, C. Choffrut, B. Palano. Context-free grammars and XML languages. In 10th International Conference on Developments in Language Theory (DLT 2006), LNCS 4036, pp. 108–119. Santa Barbara, CA, USA, 2006.

    DOI: https://doi.org/10.1007/11779148_11

38. A. Bertoni, C. Mereghetti, B. Palano. Some formal methods for analyzing quantum automata. In 7th International Workshop on Descriptional Complexity of Formal Systems (DCFS 2005), pp. 1–14. Como, Italy, 2005.

39. A. Bertoni, C. Mereghetti, B. Palano. Approximating stochastic events by quantum automata. In ERATO Conference on Quantum Information Science 2003. Kyoto, Japan, 2003.

40. A. Bertoni, C. Mereghetti, B. Palano. Lower bounds on the size of quantum automata accepting unary languages. In 8th Italian Conference on Theoretical Computer Science (ICTCS 2003), LNCS 2841, pp. 86–95. Bertinoro, Italy, 2003.

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41. A. Bertoni, C. Mereghetti, B. Palano. Quantum computing: 1-way quantum automata. In 7th International Conference on Developments in Language Theory (DLT 2003), LNCS 2710, pp. 1–20. Szeged, Hungary, 2003.

    DOI: https://doi.org/10.1007/3-540-45007-6_1

42. A. Bertoni, B. Palano. Structural complexity and neural networks. In 13th Italian Workshop on Neural Nets, LNCS 2486, pp. 190–216. Vietri sul Mare, Italy, 2002.

    DOI: https://doi.org/10.1007/3-540-45808-5_21

43. C. Mereghetti, B. Palano. Upper bounds on the size of one-way quantum finite automata. In 7th Italian Conference on Theoretical Computer Science (ICTCS 2001), LNCS 2202, pp. 123–135. Torino, Italy, 2001.

    DOI: https://doi.org/10.1007/3-540-45446-2_8

44. M. Goldwurm, B. Palano, M. Santini. On the circuit complexity of random generation problems for regular and contex–free languages. In 18th Annual Symposium on Theoretical Aspects of Computer Science (STACS 2001), LNCS 2010, pp. 305–316. Dresden, Germany, 2001.

    DOI: https://doi.org/10.1007/3-540-44693-1_27

45. C. Mereghetti, B. Palano, G. Pighizzini. On the succinctness of deterministic, nondeterministic, probabilistic and quantum finite automata. In 3rd Workshop on Descriptional Complexity of Automata, Grammars and Related Structures (DCAGRS 2001), pp. 141–148. Vienna, Austria, 2001.

46. A. Bertoni, M. Goldwurm, B. Palano. A fast parallel algorithm for the Speed up Problem of traces. In Workshop on Trace Theory and Code Parallelization, pp. 23–28, Dip. di Scienze dell'Informazione, Università degli studi di Milano, Rappora Interno n. 263–00. Milano, Italy, 2000.

47. A. Bertoni, C. Mereghetti, B. Palano. Computing the Cartier–Foata form and height of traces by threshold circuits. In Workshop on Trace Theory and Code Parallelization, pp. 29–36, Dip. di Scienze dell'Informazione, Università degli studi di Milano, Rappora Interno n. 263–00. Milano, Italy, 2000.

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48. C. Mereghetti, B. Palano. Threshold circuits for some matrix operations. Consequences on regular and probabilistic languages. In 6th Italian Conference on Theoretical Computer Science (ICTCS 1998), pp. 216–227, World Scientific. Prato, Italy, 1998.

    DOI: https://doi.org/10.1142/3944

– **Publications in Collections:**

1. M.P. Bianchi, C. Mereghetti, B. Palano. Complexity of Promise Problems on Classical and Quantum Automata. In "Computing with New Resources. Essays Dedicated a Jozef Gruska on the Occasion of His 80th Birthday." C.S. Calude, R. Freivalds, K. Iwama (eds). Springer, Lecture Notes in Computer Science, vol. 8808, pp. 161–175, 2014. Invited paper by Prof. R. Freivalds, University or Riga, Latvia.

    DOI: https://doi.org/10.1007/978-3-319-13350-8_12

2. C. Mereghetti, B. Palano. Quantum Automata and Periodic Events. In “Mathematics, Computing, Language, and Life: Frontiers in Mathematical Linguistics and Language Theory. Scientific Applications of Language Methods.” Carlos Martin-Vide (ed.). Imperial College Press, London, pp. 563–582, 2011. Invited paper by Prof. Carlos Martin-Vide, Rovira i Virgili University, Tarragona, Spain.

    DOI: https://doi.org/10.1142/9781848165458_0011

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Presentations

Participation as speaker and invited speaker at international conferences:

- Speaker at: 6th Italian Conference on Theoretical Computer Science (ICTCS 1998), Prato, Italy. Title of the talk: Threshold circuits for some matrix operations, from 09-11-1998 to 11-11-1998.
- Speaker at: Italian Workshop on Trace Theory and Code Parallelization, Milano, Italy. Title of the talk: A fast parallel algorithm for the Speed up Problem of traces, from 01-06-2000 to 02-06-2000.
- Speaker at: Italian Workshop on Trace Theory and Code Parallelization, Milano, Italy. Title of the talk: Computing the Cartier-Foata Form and Height of Traces by Threshold Circuits, from 01-06-2000 to 02-06-2000.
- Speaker at: 3rd International Workshop on Descriptional Complexity of Automata, Grammars and Related Structures (DCAGRS 2001), Vienna, Austria. Title of the talk: On the Succinctness of Deterministic, Nondeterministic, Probabilistic and Quantum Finite Automata, from 20-07-2001 to 22-07-2001.
- Speaker at: 7th Italian Conference on Theoretical Computer Science (ICTCS 2001), Torino, Italy. Title of the talk: Upper Bounds on the Size of One-way Quantum finite Automata, from 04-10-2001 to 06-10-2001.
- Speaker at: ERATO International Conference on Quantum Information Science, Kyoto, Japan. Title of the talk: Approximating stochastic events by quantum automata, from 04-09-2003 to 06-09-2003.
- Speaker at: 8th Italian Conference on Theoretical Computer Science (ICTCS 2003), Bertinoro, Italy. Title of the talk: Lower bounds on the size of quantum automata accepting unary languages, from 13-10-2003 to 15-10-2003.
- Speaker at: 8th International Workshop on Descriptional Complexity of Formal Systems (DCFS 2006), Las Cruces, New Mexico, USA. Title of the talk: Quantum automata for some multiperiodic languages, from 21-06-2006 to 23-06-2006.
- Speaker at: 10th International Conference on Developments in Language Theory (DLT 2006), Santa Barbara, CA, USA. Title of the talk: Context-free grammars and XML languages, from 26-06-2006 to 29-06-2006.
- Speaker at: 9th International Workshop on Descriptional Complexity of Formal Systems (DCFS 2007), High Tatras, Slovakia. Title of the talk: A regularity condition for context-free gram- mars, from 20-07-2007 to 22-07-2007.
- Invited Speaker at: International Workshop ABCDays on List Automata, Forgetting Automata, and Restarting Automata, Prague, Czech Republic. Title of the talk: Measure-only quantum automata, from 27-03-2011 to 29-03-2011.
- Invited Speaker at: Quantum Digital Winter Workshop, Milan, Italy. Title of the talk: Quantum Automata, from 23-01-2019 to 27-02-2019.
- Invited Speaker at: 30th International Conference on Developments in Language Theory. Title of the talk: Quantum Automata, from 30-06-2026 to 03-07-2026.
- From 2008 she supports presentations by young collaborators, as usual in her research area, contributing to the organization and preparation of slides and talks.

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Projects and Visiting

- In July 2022, she is involved in research activity at J.L. Universitat di Giessen, for about a week. Topic: "Finite automata with translucent letters".
- She is the PRINCIPAL INVESTIGATOR of an individual grant provided by MIUR for basic research activities, attributed according to academic and scientific merit criteria. Public Notice of ANVUR n. 20/2017 of 15-06-2017. Thanks to this individual grant in February 2019 and December 2019, she is involved in research activity at J.L. Universitat di Giessen, for about a week each. Topic: "Some descriptional complexity results on deterministic, nondeterministic, two-way, uniform iterated transducers".
- Active participant to the international project "Descriptional Complexity of Non-Classical Computational Models" admitted to financing on the basis of a competitive contest within the program Ateneo Italo-Tedesco "Programma Vigoni", CRUI-DAAD: Conferenza dei Rettori delle Università Italiane-Deutscher Akademisher Austausch Dienst., Years: 2011-2012. During this project she works at Giessen for about a week in each of the following dates: June 2011 and February 2012.
- Within a national project M.I.U.R. cofin, in 2012, she is involved in research activity at the Università P.J. Safarik di Kosice, Slovakia, for about a week. Topic: "Descriptional complexity of Constant Height Pushdown Automata".
- Within a national project M.I.U.R. cofin, in 2011, she is a participant to "Research meeting di ETH-Zurich" at Pitzal, Austria, for about a week. Topic: "Online algorithms: compute the output of an algorithm whenever input gradually arrives".
- She is the PRINCIPAL INVESTIGATOR of the international project "Reducing Complexity by Introducing Structure" admitted to financing on the basis of a competitive contest within the program Ateneo Italo-Tedesco "Programma Vigoni", CRUI-DAAD: Conferenza dei Rettori delle Università Italiane-Deutscher Akademisher Austausch Dienst., Years: 2007-2008. During this project she works at Frankfurt for about a week in each of the following dates: February 2007, June 2007, February 2008, and October 2008.
- In 2008 she applies for and receives a grant for a week-long visit to Paris (Short Visit Grant) within the European project "Automata: from Mathematics to Applications", head: Prof. Jean-Eric Pin. Topic: "Descriptive complexity of formal languages: a characterization by first order logic".
- In 2008 she is a participant to "Research meeting di ETH-Zurich" at Pitzal, Austria, for about a week, financially supportted by ETH-Zurich. Topic: "Descriptional complexity of probabilistic automata".
- Active participant to the following national projects with periodical research meeting in Italy:
    - Interdepartmental project: research support 2013, line 2B "Logical and formal investigations of new models of computation", 2023-2025.
    - Interdepartmental project: research support 2021, line 2B "Logical and formal investigations of new models of computation", 2021-2023.
    - Interdepartmental project: research support 2019, line 2B "Logical and formal investigations of new models of computation", 2019-2021.
    - Interdepartmental project: research support 2015, line 2B "Aspetti algebrici, computazionali nella logica, nelle sue applicazioni", 2015-2017.
    - PRIN: "Automi, linguaggi formali: aspetti matematici, applicativi", 2013-2015.
    - M.I.U.R. cofin: "Aspetti matematici, applicazioni emergenti degli automi, dei linguaggi formali: metodi probabilistici, combinatori in ambito di linguaggi formali", 2008-2010.
    - PUR: "Tecniche formali per l'analisi di sistemi computazionali, applicazioni", 2008-2010.
    - M.I.U.R. cofin: "Automi, linguaggi formali: aspetti matematici, applicativi", 2005-2007.
    - M.I.U.R. cofin: "Linguaggi formali, automi: metodi, modelli, applicazioni", 2003-2004.
    - FIRST: "Tecniche Sintattiche, Combinatorie per l'Analisi di Sistemi", 2003-2005.
    - FIRB: "Complessità descrizionale di automi, strutture correlate", 2002-2004.
    - M.I.U.R. cofin: "Linguaggi formali, automi: teoria ed applicazioni", 2001-2003.
    - MURST 40% : "Modelli di calcolo innovativi: metodi sintattici, combinatori", 1998-2000.

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– Further research meetings have been taking place in Italy at the Department of Milan with foreign collaborators pointed out in Section "International collaborations", from 2006 to 2025. Last visiting of about one week in June 2025 Proff. M. Kutrib, A. Malcher.

Conferences

– Direction of conferences and participations to scientific and organizing committees:

  * She is member of the scientific committee of the Italian Conference on Theoretical Computer Science (ICTCS), year: 2025. Conference website: https://ictcs2025.unich.it/
  * She is chair of the scientific committee and member of the organizing committee of the International Workshop on Non-Classical Models of Automata and Applications, year: 2011. Conference website: http://www.informatik.uni-giessen.de/ncma2011
  * She is member of the scientific committee of the International Workshop on Descriptional Complexity of Formal Systems, year: 2013. Conference website: http://www.csd.uwo.ca/dcfs2013/
  * She is member of the scientific committee of the International Workshop on Non-Classical Models of Automata and Applications, years: 2010, 2011, 2012, 2013, 2014, 2023, 2026. One of these conferenceswebsite: http://www.informatik.uni-giessen.de/ncma2010/
  * She is member of the scientific committee of the Workshop on Formal Models, years: 2006, 2007. Prerov, Czech Republic. One of these conference website: http://www.isim.cz/wfm2007
  * She is member of the organizing committee of the International Workshop on Descriptional Complexity of Formal Systems, year: 2005. Conference website: http://dcfs05.dico.unimi.it
  * She is member of the organizing committee of School on Quantum computing, Vietri sul Mare, Italia. Sponsored by: Capitolo Italiano dell'EATCS, European Educational Forum and IIASS. Year: 2000.

– Participation to conferences: She participates to almost all conferences where she submitted a paper.

Seminars

– She gives a seminar cycle at Institut fur Informatik, Johann Wolfgang Goethe-Universitat, Frankfurt am Main, Germany. Year: 2007. Title: "A regularity condition for context-free grammars".

– She gives a seminar cycle at Institut fur Informatik, Johann Wolfgang Goethe-Universitat, Frankfurt am Main, Germany. Year: 2008. Title: "Logical description of Structured and XML languages".

– She gives a seminar cycle at L.I.A.F.A., Universitè Paris VII, Paris, France. Year: 2008. Title: "On the Expressive Power of FO[+]".

– She gives a seminar cycle during the Research meeting of ETH-Zurich at Pitzal, Austria. Year: 2011. Title: "On-line Euclidean minimum spanning tree".

– She gives a seminar cycle at Institut fur Informatik, Universitat Giessen, Giessen, Germany. Year: 2011. Title: "Events and Languages on Unary Quantum Automata".

– She gives a seminar cycle at Institut fur Informatik, Universitat Giessen, Giessen, Germany. Year: 2012. Title: "Size lower bounds for quantum automata".

– She gives a seminar cycle at Institut fur Informatik, Universitat Giessen, Giessen, Germany. Year: 2019. Title: "Some of our results on quantum automata: a physical realization".

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Honours and awards

- She wins the Best Paper Award at the 19th International Conference on Implementation and Application of Automata, 30 July - 2 August, 2014, Giessen, Germany.
- She gets the economical incentives provided by art. 29, subsection 19, of the law 240/2010 for Professors and Researchers, attributed according to academic and scientific merit criteria. Years: 2011-2013.
- She gets the economical incentives provided by art. 1, subsection 19, of the law 27 Dec. 2017, n.205, for Professors and Researchers, attributed according to academic and scientific merit criteria. Years: 2015/2018, 2018/2020, 2021/2023.
- Upon invitation by Lane Hemaspaandra, editor in Chief of ACM SIGACT News Complexity Theory Column, she writes a guest article on Quantum Computing. Year: 2020/2021.

Membership in Scientific Organizations

- She is a member of the INTERNATIONAL ASSOCIATION IFIP WORKING GROUP 1.2 - Descriptional complexity. Membership in IFIP Working Group 1.2 is on invitation, after a positive evaluation of the curriculum by an international scientific committee. Home page of the International Federation for Information Processing: http://www.ifip.org/bulletin/bulltcs/memtc01.htm#wg12

PhD program committee membership

Participation to PhD organization committees and PhD theses supervisions:

- She is member of the scientific committee of the PhD program in Computer Science at the University of Milan. Years: from 2008.
- She is member of the PhD program research line "Modelli, Algoritmi, Complessità". Years: from 2008.
- She is the supervisor of the PhD thesis "Descriptional complexity of classical and quantum unary automata" of Maria Paola Bianchi, PhD in Computer Science, XXV cycle, University of Milan. Years: 2009-2012.
- She is the supervisor of the PhD thesis "Distributed Computing by Mobile Robots: Computational Power and Algorithm Design" of Caterina Feletti, PhD in Computer Science, XXXVIII cycle, University of Milan. Years: 2022–2025.
- On internationalization grants addressed to PhD schools of the University of Milan, she invites at the Department of Computer Science:
    - in 2006, Prof. Alexander Meduna - Department of Computer Science, Brno University of Technology, Czech Republic, to hold the course: "New Variants of Automata and Grammars";
    - in 2008, Prof. Juraj Hromkovic - Department of Computer Science, ETH Zurich, Switzerland, who holds a cycle of seminars entitled "Design of randomized algorithms".
    - in 2009, Prof. Juraj Hromkovic - Department of Computer Science, ETH Zurich, Switzerland, who holds a cycle of seminars entitled "Algorithms for NP-hard problems".
    - in 2010, Prof. Viliam Geffert - Department of Computer Science, P. J. Safarik University, Kosice, Slovakia, to hold the course: "Desciptional complexity of finite state automata".
- She is the holder of the course: "Quantum Computing: Theory, Models and Methods" within the PhD program in "Informatica", Università degli Studi di Milano, in June 2020.

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Membership in evaluation committees

She is responsible in the following evaluation processes:

- She is member of the scientific board for the competition for teaching positions at the Dipartimento di Scienze e Politiche Ambientali of the Università degli Studi di Milano. Year: 2024.
- She is member of the scientific board for the evaluation of applications for research grants devoted to MSc and PhD students offered by DAAD (Deutscher Akademischer Austauschdienst e.V.) for academic visiting periods in Germany. Year: 2022.
- On May 2013 she is member of the committee of the competition for a Type B Research Grant at the Dipartimento di Informatica of the Università degli Studi di Milano.
- She is member of the internal scientific board for the evaluation of PhD theses in Computer Science of the University of Milan. Years: 2011, 2013, 2023, 2025.
- She is member of the scientific board for the final exam awarding the PhD title of the school "Informatica, Matematica del Calcolo" at the University of Insubria. Year: 2012.
- She chairs several evaluation committees for recruitment of art. 45 personal until 2019.

Editorial board and International editorships

- She is member of the editorial board of the journal "International Journal of Natural Computing Research" (DOI: 10.4018/IJNCR). Years: from 2010. Website: http://www.igiglobal.com/journal/international-journal-natural-computing-research /1148.
- Editorship of the proceedings of the conference - Seventh International Workshop on Descriptional Complexity of Formal Systems (DCFS 2005), Università degli Studi di Milano - together with: C. Mereghetti, G. Pighizzini, D. Wotschke.
- Editorship of the proceedings of the conference - Third Workshop on Non-Classical Models for Automata and Applications (NCMA 2011), Austrian Computer Society. - together with: R. Freund, M. Holzer, C. Mereghetti, F. Otto.
- Editorship of the special issue of the international journal Theoretical Informatics and Applications - Non-Classical Models of Automata and Applications III - together with: R. Freund, M. Holzer, C. Mereghetti, F. Otto. Year: 2012.
- She is a reviewer of scientific papers submitted to the main international journals of her research area (Theoretical Computer Science, Information and Computation, Discrete Applied Mathematics, Theoretical Informatics and Applications, ...), and to the main international conferences of her research area (STACS, MFCS, SOFSEM, FCT, DLT, CSR, LATA, DCFS, CIAA, AFL, NCMA, ICTCS, ...).

External reviewer for International PhD Theses

- Title: Analysis and Implementation of Quantum Automata and Their Generalizations. Author: Aliia Khadieva. Defended at: University of Latvia, Faculty of Science and Technology, Department of Computer Science, Riga, Latvia 2025.

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Teaching

- Academic teaching:
  - She is holder of the course of "Parallel and Distributed Algorithms" for the MSc program in Computer Science, University of Milan - AA.AA. 2019/2020, 2020/2021, 2021/2022, 2022/2023, 2023/2024, 2024/2025, 2025/2026, and co-holder for the same course for AA.AA. 2014/2015, 2015/2016, 2016/2017.
  - She is co-holder of the course "Theoretical Computer Science" for the MSc program in Computer Science, University of Milan - AA.AA. 2017/2018, 2018/2019.
  - She is co-holder of the course "Quantum Information and Computing" for the BSc program in Computer Science, University of Milan - AA.AA. 2024/2025.
  - She holds the course "Formal Languages and Automata" for the BSc program in Computer Science (currently fundamental in the first year), University of Milan - AA.AA. 2003/2004, 2004/2005, 2005/2006, 2006/2007, 2007/2008, 2008/2009, 2009/2010, 2011/2012, 2012/2013, 2013/2014, 2014/2015, 2015/2016, 2016/2017, 2017/2018, 2018/2019, 2019/2020, 2020/2021, 2021/2022, 2022/2023, 2023/2024, 2024/2025.
  - She is holder of the course "Statistics and Computer Science (Computer Science: Python programming)" for the BSc program in Science and Environmental Policies, University of Milan - AA.AA. 2018/2019, 2019/2020, 2020/2021, 2021/2022, 2022/2023, 2023/2024, 2024/2025.
  - She holds the courses of "Computer Science" for the BSc program in Podiatry - A.A. 2005/2006 - and for the BSc program in Dentistry and Dental Prostheses - A.A. 2003/2004 - of the Faculty of Medicine, University of Milan.
  - She holds the course of "Computer Science " for the BSc program in Materials Science, University of Milan-Bicocca - A.A. 2001/2002.
  - She holds the lab of "Computer Networks and Databases" for the Master in Bioinformatics, University of Milan-Bicocca - A.A. 2002/2003.
  - She is teaching assistant of the course of "Formal Languages and Automata", responsible Prof. A. Bertoni, for the BSc program in Computer Science, University of Milan - A.A. 2002/2003.
  - She is teaching assistant of the course "Formal Languages and Automata" - A.A. 2001/2002 and of the course "Theoretical Computer Science" - AA.AA. 1999/2000, 2000/2001, responsible Prof. A. Bertoni, for the BSc and MSc programs in Computer Science, University of Milan.
- Related didactic activities, integrative and student tutoring:
  - She is co-author, together with Proff. A. Bertoni and C. Mereghetti, of the lecture notes in Parallel Algorithms for the course of "Parallel and Distributed Algorithms", MSc program in Computer Science of University of Milan
  - She is co-author, together with Prof. A. Bertoni, of the lecture notes in Formal Languages and Automata for the course of "Formal Languages and Automata", BSc program in Computer Science of University of Milan
  - She is co-author, together with Prof. A. Bertoni, of the lecture notes in Networks and Languages for the course of "Complexity" of "Scuola Nazionale dei Dottorati di Informatica delle Facoltà di Scienze"(SNDIS98),Bertinoro,1998.
  - She is advisor of at least 20 BSc and MSc thesis and coadvisor of more than 15 BSc and MSc theses dealing with formal language theory.
  - She participates to the " Didattica web-centrica" project for supporting teaching at the University of Milan, A.A. 2003/2004, Director of CCD Prof. G.P. Rossi.
  - She is a member of "Commissione Didattica di Informatica" whose task is the organization of Computer Science Basic courses at the University of Milan, A.A. 2004/2005, Director of CCD Prof. G. Pighizzini.
  - She serves as tutor for BSc programs in Computer Science students of the University of Milan. Years: 2008-2011, Director of CCD Prof. D. Bruschi.
  - She is tutor of Dott.ssa Caterina Feletti, PhD student in Cmputer Science, XXXVIII cycle, University of Milan. Years: 2022-2025.
  - She is tutor of Dott.ssa Maria Paola Bianchi, PhD student in Cmputer Science, XXV cycle, University of Milan. Years: 2009-2012.

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- Related didactic activities, integrative and student tutoring (follow):
    - She is a member of "Commissione Test" whose task is supporting the company that organizes admission tests for Computer Science programs at the University of Milan, establishing organizing and content details, A.A. 2016/2017, Director of CCD Prof. A. Rizzi.
    - She serves as tutor for MSc programs in Computer Science students of the University of Milan. from 2019, Director of CCD Prof. A. Rizzi.
    - She is a member of "Commissione Erasmus" for programs at the Department of Computer Science, University of Milan, from 2019 to 2021„ Directors of CCD Prof. A. Rizzi, Prof. G. Pighizzini.
- Other Teaching:
    - In A.A. 2003-2004, she is a member of the final exam commission of the SILSIS in Milan, disciplinary area 42A. In AA.AA. 1999-2000 and 2000-2001 she holds remunerated seminars for the course of "Elements of Theoretical Computer Science" of the same school SILSIS.
    - In May-June 1998 and October 1998-April 1999, she holds the lab of "Computer Science and Applied Mathematics" at I.T.I.S. "A. Righi", Corsico - Milano (topics: C, C++, Z80).

Personal information

I authorize the handling of personal information in this curriculum, according to D.Lgs n. 196/03 and following modifications and Regulations EU 679/2016 (General Regulations concerning Data Protection or GRDP) and art. 7 of University Regulations concerning protection of personal information.

I authorize, according to D.lgs 14/03/2013 n. 33 concerning transparency, in case of conferment of the position and of the fellowship, the publication of this curriculum in the web site of Università degli Studi di Milano in the section "Amministrazione trasparente", "Consulenti, collaboratori".

Date: 26 November 2025 **Place: Milan**

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