

Cristina Acciarri

Curriculum Vitae

Updated January 24, 2025

Personal Information

Full Name Cristina Acciarri Date of Birth 7th August 1982

Place of Birth San Benedetto del Tronto (AP), Italy

Citizenship Italian

Address Department of Physics, Informatics and Mathematics, University of Modena and

Reggio Emilia, via Giuseppe Campi, 213/b - 41125 Modena, Italy

e-mails cristina.acciarri@unimore.it (or acciarri@unb.br)

Website https://acciarric.github.io See also my Institutional Webpage at UniMoRe

Academic appointments and scientific positions

11/2024-present Associate Professor in Algebra (ssd MATH-02/A) at the Department of Physics, Informatics and Mathematics, University of Modena and Reggio Emilia, Italy.

11/2021–10/2024 'Ricercatore RTDb'(tenure track-Assistant Prof.) at the Department of Physics, Informatics and Mathematics, University of Modena and Reggio Emilia, Italy.

01/2013–12/2024 'Professor Adjunto' (tenured - on leave without pay starting from 01/2022 until 12/2024) at the Department of Mathematics of the University of Brasilia, Brazil.

11/2011–01/2013 **CNPq postdoctoral fellow**, Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) at the University of Brasilia, Brazil.

2007– 2010 **PhD student** at the Università degli Studi di L'Aquila (Italy) with a 3-years predoctoral grant.

Qualifications - Habilitations

25/1/2023- ASN Italian National Scientific Habilitation - Professore di I fascia (Full

25/1/2034 Professor), MIUR, ssd MATH-02/A - Algebra, Italy.

30/3/2018- ASN Italian National Scientific Habilitation - Professore di II fascia (Associate

30/3/2029 Professor), MIUR, ssd MATH-02/A - Algebra, Italy.

12/03/2014-lifetime Profesor Contratado Doctor, PCD: 2014-789, Mathematics, Spanish Ministry

for Education, Spain.

12/03/2014-lifetime **Profesor Ayudante Doctor**, PAD: 2014-790, Mathematics, Spanish Ministry for Education, Spain.

Education

2007–2010 **PhD in Mathematics**, *University of L'Aquila, Department of Pure and Applied Mathematics*, L'Aquila, Italy

- Evaluation Excellent with "European PhD label" (highest possible grade in the Italian system).
- 2004–2006 Laurea Specialistica in Mathematics, University of Rome 'La Sapienza', Department of Mathematics "G. Castelnuovo", Rome, Italy
- Final mark 110/110 e lode (highest possible grade in the Italian system with honors).
- 2001–2004 Laurea Triennale in Mathematics, University of Rome 'La Sapienza', Department of Mathematics "G. Castelnuovo", Rome, Italy
- Final mark 110/110 e lode (highest possible grade in the Italian system with honors).
- 1996-2001 Maturità classica (high school), Liceo Classico 'F. Stabili', Ascoli Piceno, Italy
- Final mark 100/100 (highest possible grade in the Italian system).

Research links

- ORCID http://orcid.org/0000-0002-7895-7705
- MathSciNet https://mathscinet.ams.org/mathscinet/publications-search?query= auid%3A933258
 - Scopus https://www.scopus.com/authid/detail.uri?authorId=40461096800
- Researchgate https://www.researchgate.net/profile/Cristina-Acciarri
 - arXiv https://arxiv.org/search/?searchtype=author&query=Acciarri%2C+C

Publications

- 32. Acciarri, C., Guralnick, R.M., Khukhro, E. and Shumyatsky, P., Rank properties of commutators with elements of Carter subgroups of finite groups, (2024), in preparation, 25 pages.
- 31. Acciarri, C., Guralnick, R.M., Khukhro, E. and Shumyatsky, P., Rank type conditions on commutators in finite groups, (2023), submitted, 21 pages. arXiv:2404.14599
- 30. Acciarri, C. and Shumyatsky, P., *Varieties of groups and the problem on conciseness of words*, (2023), Annali della Scuola Normale Superiore di Pisa, Classe di Scienze, (2023) accepted, 23 pages. doi:http://doi.org/10.2422/2036-2145.202306_017 arXiv: 2308.02209
- 29. Acciarri, C., Guralnick, R.M. and Shumyatsky, P. (2023), *Criteria for solubility and nilpotency of finite groups with automorphisms*. Bulletin of the London Mathematical Society, 55: 1340–1346. doi:http://doi.org/10.1112/blms.12794 Wiley's Article Share:link arXiv: 2206.03403
- 28. C. Acciarri, R.M. Guralnick and P. Shumyatsky. *Coprime automorphisms of finite groups*, **Transactions of the American Mathematical Society**, 375:7 (2022), 4549–4565.

 doi:https://doi.org/10.1090/tran/8553 arXiv: 2108.00919
- C. Acciarri and P. Shumyatsky. Profinite groups with restricted centralizers of π-elements, Mathematische Zeitschrift, 301(2022), 1039–1045.
 doi:https://doi.org/10.1007/s00209-021-02955-9 SharedIt:link arXiv: 2107.00491
- 26. C. Acciarri and P. Shumyatsky. *A stronger form of Neumann's BFC-theorem*, Israel Journal of Mathematics, 242(2021), 269–278.
 - doi:https://doi.org/10.1007/s11856-021-2133-1 SharedIt:link arXiv: 2003.09933
- 25. C. Acciarri and A. Lucchini. *Genus, thickness and crossing number of graphs encoding the generating properties of finite groups*, **Discrete Mathematics**, 344(2021), 112289. **doi:**https://doi.org/10.1016/j.disc.2021.112289 arXiv: 2003.02444
- 24. C. Acciarri and P. Shumyatsky. *On the rank of a finite group of odd order with an involutory automorphism*, **Monatshefte für Mathematik**, 194(2021), 461–469.

```
doi:http://dx.doi.org/10.1007/s00605-020-01479-4 SharedIt:link
```

- 23. C. Acciarri and A. Lucchini. *Graphs encoding the generating properties of a finite group*, Mathematische Nachrichten, 293(2020), 1644–1674.

 doi:https://doi.org/10.1002/mana.201900144 arXiv: 1707.08348
- 22. C. Acciarri and D. Silveira. Engel-like conditions in fixed points of automorphisms of profinite groups, Annali di Matematica Pura ed Applicata 199(2020), 187–197. doi:http://dx.doi.org/10.1007/s10231-019-00872-7 SharedIt: link arXiv:1902.08612
- 21. C. Acciarri and P. Shumyatsky. *On groups in which Engel sinks are cyclic*, **Journal of Algebra** 539(2019), 366–376.
 - doi: http://dx.doi.org/10.1016/j.jalgebra.2019.08.019 arXiv: 1905.07494
- 20. C. Acciarri, E. Khukhro and P. Shumyatsky. *Profinite groups with an automorphism whose fixed points are right Engel*, **Proceedings of the American Mathematical Society** 147(2019), 3691–3703. doi:http://dx.doi.org/10.1090/proc/14519 arXiv:1808.04703
- C. Acciarri, D. Silveira and P. Shumyatsky. Engel sinks of fixed points in finite groups, Journal of Pure and Applied Algebra 223(2019), 4592–4601.
 doi:http://dx.doi.org/10.1016/j.jpaa.2019.02.006 arXiv:1809.02733
- 17. C. Acciarri and D. Silveira. *Profinite groups and centralizers of coprime automorphisms whose elements are Engel*, **Journal of Group Theory** 21(2018), 485–509. doi:http://dx.doi.org/10.1515/jgth-2018-0001 arXiv:1707.06889
- C. Acciarri, D. Silveira and P. Shumyatsky. On groups with automorphisms whose fixed points are Engel, Annali di Matematica Pura ed Applicata 197(2018), 307–316.
 doi:http://dx.doi.org/10.1007/s10231-017-0680-1 arXiv:1702.02899
- C. Acciarri and P. Shumyatsky. Coverings of commutators in profinite groups, Rendiconti del Seminario Matematico della Università di Padova 137(2017), 237–257.
 doi:http://dx.doi.org/10.4171/RSMUP/137-14 arXiv:1511.07843
- C. Acciarri and P. Shumyatsky. Commutators and commutator subgroups in profinite groups, Journal of Algebra 473(2017), 166–182.
 doi:http://dx.doi.org/10.1016/j.jalgebra.2016.11.001 arXiv:1408.5034
- 13. C. Acciarri and P. Shumyatsky. *Profinite groups and the fixed points of coprime automorphisms*, **Journal of Algebra** 452(2016), 188–195. doi:http://dx.doi.org/10.1016/j.jalgebra.2016.01.010 arXiv:1703.00988
- 12. C. Acciarri and P. Shumyatsky. On finite groups in which coprime commutators are covered by few cyclic subgroups, Journal of Algebra 407(2014), 358–371.

 doi:http://dx.doi.org/10.1016/j.jalgebra.2014.02.033 arXiv:1311.6148
- 11. C. Acciarri, P. Shumyatsky and A. Thillaisundaram. *Conciseness of coprime commutators in finite groups*, Bulletin of the Australian Mathematical Society 89(2014), 252–258. doi:http://dx.doi.org/10.1017/S0004972713000361 arXiv:1303.1584
- 10. C. Acciarri and P. Shumyatsky. *Centralizers of coprime automorphisms of finite groups*, **Annali di Matematica Pura ed Applicata** 193(2014), 317–324. doi:http://dx.doi.org/10.1007/s10231-012-0274-x arXiv:1112.5880
- 9. C. Acciarri and P. Shumyatsky. *On words that are concise in residually finite groups*, **Journal of Pure and Applied Algebra** 218(2014), 130–134.

- doi:http://dx.doi.org/10.1016/j.jpaa.2013.04.018 arXiv:1212.0581
- 8. C. Acciarri and P. Shumyatsky. *On profinite groups in which commutators are covered by finitely many subgroups*, Mathematische Zeitschrift 274(2013), 239–248.
 - doi:http://dx.doi.org/10.1007/s00209-012-1067-z SharedIt: link arXiv:1112.5879
- 7. C. Acciarri and P. Shumyatsky. *Double automorphisms of graded Lie algebras*, **Journal of Algebra** 387(2013), 1–10.
 - doi:http://dx.doi.org/10.1016/j.jalgebra.2012.12.023 arXiv:1207.1323
- 6. C. Acciarri and P. Shumyatsky. *On verbal subgroups in finite and profinite groups*, **Algebra and Discrete**Mathematics 14(2012), 1–13. http://mi.mathnet.ru/eng/adm80 arXiv:1703.00979.
- C. Acciarri, G.A. Fernández-Alcober and P. Shumyatsky. A focal subgroup theorem for outer commutator words, Journal of Group Theory 15 (2012), 397–405.
 doi:http://dx.doi.org/10.1515/JGT.2011.113 arXiv:1108.2284.
- C. Acciarri, A. De Souza Lima and P. Shumyatsky. Derived subgroups of fixed points in profinite groups, Glasgow Mathematical Journal 54 (2012), 97–105.
 doi:http://dx.doi.org/10.1017/S0017089511000383 arXiv:1108.0655.
- 3. C. Acciarri and P. Shumyatsky. *Fixed points of coprime operator groups*, **Journal of Algebra** 342 (2011), 161–174.
 - doi:http://dx.doi.org/10.1016/j.jalgebra.2011.06.013 arXiv:1108.0698.
- 2. C.Acciarri and G.A. Fernández-Alcober. *Positive laws on generators in powerful pro-p groups*, on Ischia Group Theory 2010: Proceedings of the Conference on Group Theory, 2011 (10 pages). https://www.worldscientific.com/doi/epdf/10.1142/9789814350051_0001 arXiv:1108.0547.
- C. Acciarri and G.A. Fernández-Alcober. Positive laws on large sets of generators: counterexamples for infinitely generated groups, Journal of the Australian Mathematical Society 89 (2010), 289–296. doi:http://dx.doi.org/10.1017/S1446788711001145 arXiv:1108.0692

Theses

14/05/2010 PhD Thesis

- Title Positive laws on large sets of generators and on word values in residually-p groups. (full text available at the following researchgate link)
- Supervisor Prof. Gustavo A. Fernández Alcober (University of the Basque Country, Bilbao, Spain).
- 26/09/2006 Thesis for Laurea Specialistica
 - Title Sul derivato in certi p-gruppi.
 - Supervisor Prof. Marialuisa J. de Resmini (University of Rome 'La Sapienza', Rome, Italy).
- 1/12/2004 Essay for Laurea Triennale
 - Title I solidi platonici e i sottogruppi finiti di SO_3 .
- Supervisor Prof. Valentina Barucci (University of Rome 'La Sapienza', Rome, Italy).

Organizing Activities

- 'Finite and Profinite Groups' Session Co-organizer, at RSME's 7th Congress of Young Researchers, UPV/EHU, Bilbao, Spain, https://jovenes2025.rsme.es/index_en.html
- 2023-2024 **Group Theory Session Co-organizer**, at Algebra Latin-American Colloquium 2024, Pontificia Universidad Cátolica de Chile, Santiago de Chile, Chile, https://cla2024.mat.uc.cl/

- 'Topics in Group Theory' Co-organizer, a conference on the occasion of Andrea Lucchini 60th birthday, Dipartimento di Matematica 'Tullio Levi-Civita', University of Padova, Padova, Italy, https://events.math.unipd.it/tgt/
- 2022-2023 Conference 'Finite and Residually Finite Groups' Co-organizer, a conference in honor of 60th birthday of P. Shumyatsky, Bizkaia Aretoa UPV/EHU, Bilbao, Spain, https://acciarricristina.wixsite.com/pavel60
- 2020-2021 Group Theory Session Co-organizer, at 33rd Brazilian Mathematical Colloquium, IMPA, Rio de Janeiro, Brazil, https://impa.br/en_US/eventos-do-impa/2021-2/33cbm/
- 2019-2020 Conference 'XII Summer Workshop in Mathematics' Co-organizer, Brasilia, Brazil, https://www.mat.unb.br/verao2020/workshop_en.html
- 2019-2020 'XLIX Summer School in Mathematics' Co-organizer, Brazil, https://www.mat.unb.br/verao2020/verao/verao_en.html
 - 2019 Group Theory Session Co-organizer, at XXIII Algebra Latin-American Colloquium, Colegio Nacional, Mexico City, Mexico, https://sites.google.com/view/grouptheoryatcla2019/home
- 2017, 2019 **Algebra Seminar Organizer**, Departamento de Matemática, Universidade de Brasília, Brazil
 - 2011 Collaboration in the organisation, conference EMS-RSME Joint Mathematical Weekend, *Bilbao*, *Spain*
 - 2011 Collaboration in the organisation, conference New Trends in Group Theory 2011, CIEM, Castro-Urdiales, Spain

Grants and Scholarships

- 'Bolsa de Produtividade em Pesquisa' (Research and Productivity Grant), Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), Principal Investigator, PQ-2 grant n.309989/2020-5 of R\$ 39.600 (Brazilian grants have no departmental overhead).- interrupted in 2022 for leaving license
- 2018–2021 'Bolsa de Produtividade em Pesquisa' (Research and Productivity Grant), Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), Principal Investigator, PQ-2 grant n.304167/2017-7 of R\$ 39.600 (Brazilian grants have no departmental overhead).
- 03/2017-01/2018 'Bolsa de Pós-Doutorado Senior no exterior', Visiting Professor grant (sabbatical year) at Università degli Studi di Padova (Italy), CAPES-Brazil personal grant of € 26.510
 - 2015–2018 'Bolsa de Produtividade em Pesquisa' (Research and Productivity Grant), Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), Principal Investigator, PQ-2 grant n. 303651/2014-8 of R\$ 39.600 (Brazilian grants have no departmental overhead).
 - 2014 'Incentivo à Produção Científica' (Research Grant), Fundação de Estudos em Ciências Matemáticas (FEMAT), Principal Investigator, grant of R\$ 5.000 (Brazilian grants have no departmental overhead).
 - 2011–2013 CNPq Junior Postdoctoral Grant, Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), Principal Investigator, grant n. 500825/2011-4 of R\$ 53.600 at the University of Brasilia, Brazil.

06/2011 Grant awarded by the 'Mathematisches Forschungsinstitut Oberwolfach' in order to attend the Oberwolfach Seminar: Algebraic Properties of Profinite Groups organised by MFO.

08/2007 Grant awarded by the 'Scuola Matematica Interuniversitaria' to attend the Summer Course in Algebra organized by SMI.

11/2006– 11/2009 Predoctoral grant, PhD student at the Università degli Studi di L'Aquila (L'Aquila, Italy), three years grant.

Coordination of funded research projects

Project title **Grafos, coberturas, endomorfismos virtuais e propriedades residuais de grupos**, (Demanda Espontânea 03/2018- N. 22474.93.35580.0205/2018)

Period from 1/08/2019 to 22/02/2022

Institutions University of Brasilia

Scientist in charge C. Acciarri (University of Brasilia, Brazil - 5 members - R\$70.000)

Funder FAPDF- Fundação de Apoio à Pesquisa do Distrito Federal, Brazil

Membership of funded research projects

Project title **Grupos Finitos** e **Profinitos**, (Eital MCTI/CNPq nº 16/2024- Project

N.401532/2024-0 - CNPq)

Period from 1/1/2025 to 31/12/2026

Institutions University of Brasilia

Scientist in charge P. Shumyatsky (University of Brasilia, Brazil - 15 members)

Funder CNPq- Conselho Nacional de Desenvolvimento Científico e Tecnológico, Brazil

Project title **Grupos Profinitos**, (Edital 10/2023 Universal- Project N.401998/2023-1 - CNPq)

Period from 1/12/2023 to 30/11/2026

Institutions University of Brasilia

Scientist in charge P. Zalesskii (University of Brasilia, Brazil - 10 members)

Funder CNPq- Conselho Nacional de Desenvolvimento Científico e Tecnológico, Brazil

Project title **Grupos e automorfismos**, (Demanda Espontânea N. 22565.93.27419.0205/2018)

Period from 1/08/2019 to 31/07/2021

Institutions University of Brasilia

Scientist in charge P. Shumyatsky (University of Brasilia, Brazil)

Funder FAPDF- Fundação de Apoio à Pesquisa do Distrito Federal, Brazil

Project title **Grupos Profinitos**, (Demanda Espontânea N. 15816.78.28134.2504/2017)

Period from 1/11/2017 to 31/10/2019

Institutions University of Brasilia

Scientist in charge P. Zalesskii (University of Brasilia, Brazil)

Funder FAPDF- Fundação de Apoio à Pesquisa do Distrito Federal, Brazil

Project title Estruturas Algébricas, (Demanda Espontânea N. 9610.56.28932.0604/2016)

Period from 1/12/2016 to 30/11/2019

Institutions University of Brasilia

Scientist in charge N. Romeu Rocco (University of Brasilia, Brazil)

Funder FAPDF- Fundação de Apoio à Pesquisa do Distrito Federal, Brazil

Project title **Grupos Finitos** e **Profinitos**, (Demanda Espontânea N. 0193.000842/2015)

Period from 1/11/2015 to 31/10/2017

Institutions University of Brasilia

Scientist in charge P. Shumyatsky (University of Brasilia, Brazil)

Funder FAPDF- Fundação de Apoio à Pesquisa do Distrito Federal, Brazil

Project title Combinatorial methods in the theory of profinite groups, (Programa Geral de

Cooperação Internacional CAPES/project 051/14)

Period from 1/03/2015 to 31/12/2016

Institutions University of Milan - Bicocca, University of Brasilia

Scientists in charge T. Weigel (University of Milan -Bicocca, Italy), P. Zalesskii (University of Brasilia,

Brazil)

Funder Spanish Ministry of Economy and Competitiveness

Project title **Grupos, representaciones y geometría**, (MTM2014-53810-C2-2-P)

Period from 1/01/2015 to 31/12/2017

Institutions Autonomous University of Madrid, University of the Basque Country

Scientists in charge A. Jaikin-Zapirain (Autonomous University of Madrid, Spain), G.A. Fernández-

Alcober (University of the Basque Country, Spain)

Funder Spanish Ministry of Economy and Competitiveness

Project title Grupos Profinitos e Residualmente Finitos, CAPES/DGU/projeto 304/13

Period from 01/04/2013 to 31/12/2016

Institutions Autonomous University of Madrid, University of the Basque Country, University of

Brasilia

Scientist in charge P. Shumyatsky (University of Brasilia, Brazil), G.A. Fernández-Alcober (University

of the Basque Country, Spain), A. Jaikin-Zapirain (Autonomous University of

Madrid, Spain)

Funder CAPES- Brazil, Spanish Ministry of Science and Innovation

Project title Grupos, caracteres y combinatoria algebraica, (MTM 2011-28229-C02-02)

Period from 1/4/2012 to 31/12/2015

Institutions Autonomous University of Madrid, University of the Basque Country

Scientists in charge A. Jaikin-Zapirain (Autonomous University of Madrid, Spain), G.A. Fernández-

Alcober (University of the Basque Country, Spain)

Funder Spanish Ministry of Science and Innovation

Project title Pro-p gruppi e algebre di Lie, gruppi finiti, rappresentazioni, (PRIN Project)

Period from 22/3/2010 to 22/9/2012

Institutions University of L'Aquila, University of Rome 'La Sapienza', University of Trento

Scientist in charge C.M. Scoppola (University of L'Aquila, Italy)

Funder Italian Ministry of Education, University and Research

Project title **Grupos, caracteres y combinatoria algebraica**, (MTM 2008 - 06680 - C02)

Period from 1/1/2009 to 31/12/2011

Institutions Autonomous University of Madrid, University of the Basque Country

Scientists in charge A. Jaikin-Zapirain (Autonomous University of Madrid, Spain), G.A. Fernández-

Alcober (University of the Basque Country, Spain)

Funder Spanish Ministry of Science and Innovation

Project title Gruppi, Algebre di Lie, Crittografia, (PRIN Project)

Period from 10/2/2007 to 9/2/2009

Institutions University of L'Aquila, University of Rome 'La Sapienza', University of Trento

Scientist in charge C.M. Scoppola (University of L'Aquila, Italy)

Funder Italian Ministry of Education, University and Research

Invited talks at International Conferences

- o *TBA*, INdAM Workshop "Old and New Trends in Mathematical Collaboration between Brazil and Italy, Roma (Italy), June 23rd- 27th 2025
- O Rank type conditions on commutators in finite groups, Topics in Group Theory on the occasion of A. Lucchini 60th(+) birthday, Padova (Italy), September 10th- 13th 2024 https://events.math.unipd.it/tgt/
- On groups with automorphisms whose fixed points satisfy Engel-like conditions, 10 Years of Algebra at Lincoln, University of Lincoln and online, June 12th- 14th 2024

https://ysantosrego.github.io/files/EK-Algebra10/

- On conciseness of words in residually finite groups, the 2023 Ural Workshop on Group Theory and Combinatorics, Ural Federal University, Yekaterinburg, Russia (online), August 21st–27th 2023 http://2023uwgtc.imm.uran.ru
- O Sulle parole concise nei gruppi residualmente finiti, Teoria dei gruppi a Paestum, Paestum (SA), Italy, July 6th-7th 2023 https://sites.google.com/unisa.it/tdgpaestum
- O Coprime automorphisms of finite groups, Finite and Residually Finite Groups -a conference in honor of 60th birthday of P. Shumyatsky, Bilbao, Spain, June 20th-23rd 2023 https://acciarricristina.wixsite.com/pavel60
- O Coprime automorphisms of finite groups, Advances in Group Theory and Applications 2023, Lecce, June 5th-9th 2023 https://www.advgrouptheory.com/agta2023/index.html
- \odot On profinite groups with restricted centralizers of π -elements, The Al@Bicocca Flash Workshop Two days of Algebra in Bicocca, University of Milano-Bicocca, February 27th-28th 2023

https://sites.google.com/unimib.it/algebra-in-bicocca-english/algebra-seminar

- o Coprime automorphisms of finite groups, Ischia Group Theory 2022, Ischia (Italy), June 20th 25th 2022.
- O A stronger version of Neumann's BFC-theorem, Groups in Galway 2021, (online at ZOOM), December 2nd 2021 https://torossmann.github.io/gig21/
- o *A stronger version of Neumann's BFC-theorem*, GOTHIC -Ischia Online Group Theory Conference, (online at ZOOM), March 4th 2021

https://sites.google.com/unisa.it/e-igt2020/winter-semester-2021

- \circ Graphs encoding the generating properties of a finite group, Ischia Group Theory 2018, Ischia (Italy), March 19^{th} 23^{rd} 2018.
- o Groups with automorphisms whose fixed points satisfy Engel-like conditions., First Joint UMI-SIMAI-PTM

- meeting, Wroclaw (Poland), September 17th 20th 2018.
- o *Graphs encoding the generating properties of a finite group*, II Joint Meeting Spain-Brazil in Mathematics RSME-SEMA-SBM-SBMAC, Cádiz (Spain), December 11th 14th 2018.
- O Coverings of commutators in profinite groups, Ischia Group Theory 2016, Ischia (Italy), March 29rd April 2nd 2016.
- O Profinite groups and the fixed points of coprime automorphisms., Il Congresso Brasileiro de Jovens Pesquisadores em Matemática Pura e Aplicada, Campinas, December 5th-7th 2016.
- \circ Coverings in finite and profinite groups, II Workshop in Groups and Algebras, Belo Horizonte (Brazil), July 6^{th} 8^{th} 2015.
- On words that are concise in residually finite groups, Ischia Group Theory 2014, Ischia (Italy), April 1st-5th 2014.
- o *Positive laws on generators in p-adic analytic pro-p groups*, 29° Colóquio Brasileiro de Matemática- IMPA, Rio de Janeiro (Brazil), July 21st August 2nd 2013.
- On verbal subgroups in finite and profinite groups, XIX Coloquio Latinoamericano de Algebra, Pucón (Chile), December 11th-14th 2012.
- Fixed points of coprime automorphisms of finite groups, XXII Brazilian Algebra Meeting, Salvador (Brazil), July 15th–20th 2012.

Other talks (and posters) at Meeting, Seminars, etc

- Varieties of groups and the problem on conciseness of words- invited, Algebra Seminar, University of Trento, June 25th 2024
- On conciseness of words in residually finite groups- invited, Algebra and Geometry Seminar, University of L'Aquila, October 26th 2023
- On profinite groups with restricted centralizers of π -elements invited, Algebra Seminar, University of Lincoln, Lincoln (online at ZOOM), March 29th 2023
- https://algebra-lincoln.org/2023/03/29/algebra-seminar-talk-by-cristina-acciarri/
- o On profinite groups with restricted centralizers of π -elements invited, Ural Seminar on Group Theory and Combinatorics, Ural Federal University, Yekaterinburg (online at BBB), March 14th 2023 http://uwgtc.imm.uran.ru
- \odot On profinite groups with restricted centralizers of π -elements, Algebra Seminar, University of Padova, May 12th 2022
- O Una versione più forte del BFC-teorema di Neumann, welcoming seminar for researchers recently hired, University of Modena and Reggio Emilia, April 7th 2022.
- o *Uma versão mais forte do BFC-Teorema de Neumann* **invited**, Semana Temática de Álgebra do Programa de Verão PGMAT-UFBA 2022, Federal University of Bahia, February 3rd 2022
- o A stronger version of Neumann's BFC-theorem invited, Algebra, Combinatorics and Number Theory Seminar, University of Porto, October 26th 2021
- A stronger version of Neumann's BFC-theorem invited, Seminário de Álgebra IMECC-UNICAMP,
 University of Campinas, October 26th 2021
- \circ On graphs encoding the generating properties of groups, XI Summer Workshop in Mathematics, Brasilia, February 18^{th} – 22^{nd} 2019.
- o *Graphs encoding the generating properties of a finite group*, International Congress of Mathematicians 2018, Rio de Janeiro, August 1st–9th 2018.

- On groups with automorphisms whose fixed points are Engel, Advances in Group Theory and Applications 2017, Lecce, September 5th-8th 2017.
- o *Graphs encoding the generating properties of a finite group*, Groups St Andrews 2017, Birmingham, August 5th-13th 2017.
- Profinite groups and the fixed points of coprime automorphisms, Groups, Rings, and their Automorphisms
 Conference in Honor of Evgeny Khukhro, Lincoln, August 31st September 2nd 2016.
- \circ Coverings of commutators in profinite groups, First joint meeting Brazil-Spain in Mathematics, Fortaleza, December 5th-10th 2015.
- O Coverings in finite and profinite groups, Lie and Jordan Algebras, Their Representations and Applications VI conference in honor of Efim Zelmanov, Bento Gonçãlvez, December 13th–19th 2015.
- \circ On concise words in residually finite groups, XX Coloquio Latinoamericano de Algebra, Lima, December 8^{th} – 12^{th} 2014.
- Fixed points of coprime automorphisms of finite groups, Ischia Group Theory 2012, Ischia, March 26th–29th 2012.
- Focal subgroups and outer commutator words, Seminario de Algebra, Universidade de Brasília, Brasília,
 2nd December 2011.
- \circ Focal subgroups and outer commutator words, EMS-RSME Joint Mathematical Weekend, Bilbao, October 7th-9th 2011.
- Focal subgroups and words, seminar of the Departamento de Matemáticas, Universidad de Murcia, 2nd June 2011.
- Focal subgroups and words, New Trends in Group Theory 2011, CIEM, Castro-Urdiales, May 17th-20th
 2011.
- o *Positive laws on large sets of generators in residually-p groups*, Seminaire Georges Reeb − Algèbre, Algèbres de Lie et Géométrie Différentielle, LMIA Université de Haute Alsace, Mulhouse, 8th March 2011. o *Positive laws on large sets of generators*, Algebra Seminar, UnB, Brasília 19th November 2010.
- Positive laws on large sets of generators in residually-p groups: finitely generated vs infinitely generated,
 Groups and Their Actions, Bedlewo (Poznan), August 23rd-28th 2010.
- O Leyes positivas en conjuntos 'grandes' de generadores y en los valores de una palabra en grupos residulmente-p, VIII Encuentro en Teoría de Grupos, University of the Basque Country, Bilbao, June 17th–19th 2010.
- Positive laws on large sets of generators, Groups St Andrews 2009 in Bath, University of Bath, Bath, August 1st-15th 2009.
- Leyes positivas en grupos, 25 años de álgebra en la UPV/EHU, University of the Basque Country, Bilbao, May 28th-29th 2009.
- Positive laws on large sets of generators in residually-p groups: finitely generated vs infinitely generated, The Postgraduate GT Conference 2009, University of Manchester, Manchester, April 15th–17th 2009.
- o Positive laws on large sets of generators: some questions, Infinite Group Theory, University of Edinburgh, Edinburgh, December 10th-12th 2008.
- POSTER -Focal subgroups and outer commutator words, EMS-RSME Joint Mathematical Weekend, Bilbao, October 7th-9th 2011.
- \circ POSTER- *Focal subgroups and words*, Encuentro en Teoría de grupos y sus aplicaciones on the occasion of the 60-th birthday of Prof. Javier Otal, Zaragoza, June 10^{th} – 11^{th} 2011.
- O POSTER -Positive laws on large sets of generators and on word values, Ischia Group Theory 2010, Ischia

Other conferences, workshops and courses attended

- o Ischia Group Theory 2024, Ischia (Naples), April 8th-13th 2024
- Topics in Algebra, a conference in honor of A. Caranti and C.M. Scoppola, Trento, September 1st–2nd
 2022
- 16th Jerusalem Midrasha Mathematicae, on Words and Growth, Institute for Advanced Studies at the Hebrew University, Jerusalem, June10th-15th 2012
- Oberwolfach Seminar: Algebraic Properties of Profinite Groups, Mathematisches Forschungsinstitut Oberwolfach, Oberwolfach-Walke, June 12th–18th 2011.
- O Series of mini-courses at the conference GAGTA 5 Geometric and Asymptotic Group Theory with Applications, Universitat Politècnica de Catalunya, Manresa, July 5th-8th 2011.
- o *Encuentro en teoría de grupos y sus aplicaciones* on the occasion of the 60-th birthday of Prof. Javier Otal, University of Zaragoza, Zaragoza, June 10th-11th 2011.
- o Workshop INdAM INdAM University of Rome "La Sapienza", Rome, May 24th-28th 2010.
- o Ischia Group Theory 2010, Ischia (Naples), April 14th-17th 2010.
- o *Group Theory* a joint meeting of the Edinburgh Mathematical Society and the London Mathematical Society, University of Edinburgh, Edinburgh, December 12th–13th 2008.
- o Algebraic groups and related topics LMS/EPSRC short instructional course, University of Birmingham, Birmingham, September 15th-19th 2008.
- o Interactions towards secure communication, CIEM, Castro-Urdiales, May 15th-16th 2008.
- Workshop 'The Algebraic Structure of Profinite Groups', Royal Holloway- University of London, London, April 7th-8th 2008.
- o Teoria dei gruppi e applicazioni, University of Florence, Florence, December 12th–14th 2007.
- CIRM-Clay-INdAM/GNSAGA conference 'Profinite and Asymptotic Group Theory, Levico Terme (Trento), September 16th − 21st 2007.
- o 1st GNAMPA Summer School De Ludo Aleae Rome, September 10th-14th 2007.
- O Summer Course in Mathematics Course in Algebra, SMI, Cortona, August 13th-31st 2007.

Teaching

Instructor at Department of Physics, Informatics and Mathematics, Università degli Studi di Modena e Reggio Emilia (Italy)

- academic year 24-25 Algebra superiore (graduate course MN1-306, 42 hours)

 Fondamenti di algebra e geometria (graduate course M263-065, 21 hours)

 Algebra A (undergraduate course MN1-1030, 72 hours)
- academic year 23-24 Strutture algebriche (graduate course MN1-512, 28 hours)

 Algebra A (undergraduate course MN1-1030, 72 hours)
- academic year 22-23 Algebra superiore (graduate course MN1-306, 36 hours)

 Matematica (undergraduate course SB-25/B-47, 56 hours)
- academic year 21-22 Strutture algebriche (graduate course MN1-512, 36 hours)

 Geometria e Algebra Lineare (undergraduate course MECC-2, 20 hours)

Instructor	at Department of Mathematics, ${\sf EHU/UPV}$ Universidad del País Vasco, Bilbao (Spain)
academic year 2023	On Lie ring methods in group theory (PhD course in English, 10 hours)
Instructor	at Department of Mathematics, Università degli Studi di Padova (Italy)
academic year 2017	On Lie ring methods in group theory (PhD course in English, 16 hours)
	at Department of Mathematics, Universidade de Brasília (Brazil) <i>Introduction to Linear Algebra</i> (undergraduate course 113093, 60 hours) <i>Algebra 1</i> (undergraduate course 113107 A, 60 hours)
2nd semester 2020	Introduction to Linear Algebra (undergraduate course 113093, 60 hours) Algebra 1 (undergraduate course 113107 A, 60 hours)
1st semester 2020	Algebra 1 (undergraduate course 113107 A, 60 hours)
2nd semester 2019	Algebra 1 (undergraduate course 113107 B, 60 hours)
1st semester 2019	Introduction to Linear Algebra (undergraduate course 113093, 60 hours) Algebra 1 (undergraduate course 113107 B, 60 hours)
2nd semester 2018	Lie Methods in Group Theory (PhD course in English, 60 hours) Algebra 1 (undergraduate course 113107, 60 hours)
1st semester 2018	Group Theory 2 (Master course 313386, 60 hours) Algebra 1 (undergraduate course 113107 B, 60 hours)
academic year 2017	sabbatical year spent at UNIPD - Padova, Italy
2nd semester 2016	Algebra 1 (undergraduate course 113107 B&C, 60 hours each) – 2 courses
1st semester 2016	Introduction to Linear Algebra (undergraduate course 113093, 75 hours) Group Theory 2 (Master course 313386, 60 hours)
2nd semester 2015	Introduction to Linear Algebra (undergraduate course 113093, 75 hours)
1st semester 2015	Algebra 1 (undergraduate course 113107 B, 60 hours) Group Theory 2 (Master course 313386, 60 hours)
2nd semester 2014	Introduction to Linear Algebra (undergraduate course 113093, 75 hours) Algebra 1 (undergraduate course 113107 B, 60 hours)
1st semester 2014	Introduction to algebra (Master course, 60 hours) Introduction to Linear Algebra (undergraduate course 113093, 75 hours)
2nd semester 2013	Introduction to Linear Algebra (undergraduate course 113093, 75 hours) Calculus III (undergraduate course 113051, 75 hours)
1st semester 2013	Algebra 1 (undergraduate course 113107 B, 60 hours) Calculus III (undergraduate course 113051, 75 hours)

Students advising (main advisor, unless otherwise specified)

- 2024 **Roberto Roversi, BSc in Mathematics**, University of Modena and Reggio Emilia, *Commuting Probability in Finite Groups*.
- 2020 João Pedro Papalardo Azevedo, MSc in Mathematics, University of Brasilia, Thesis title: Finite Groups of Bounded Rank Admitting an Almost Regular Automorphism: a Lie-Theoretic Approach, with CAPES grant.
 - Mateus Figueiredo de Souza, MSc in Mathematics, University of Brasilia, Thesis title: Centralizadores em Grupos de Torção Residualmente Finitos. Um estudo via Métodos de Lie., with CAPES grant.
- 2018 Co-advisor for Danilo S. da Silveira, PhD in Mathematics, University of Brasilia. Thesis title: *Grupos com automorfismos cujos pontos fixos são Engel*, with CAPES grant. Main advisor: P. Shumyatsky.
- 2017 **Sara Raissa Silva Rodrigues, MSc in Mathematics**, University of Brasilia. Thesis title: *Sobre grupos finitos e profinitos quase-Engel*, with CAPES grant.
- 2016 Jéssyca Cristine Lima de Souza, MSc in Mathematics, University of Brasilia. Thesis title: Involuções e seu centralizadores em grupos finitos, with CNPq grant.
 João Pedro Papalardo Azevedo, "Iniciação científica em álgebra", undergraduate independent supervised study with FAPDF grant, University of Brasilia.
- 2015 **Rebeca Chuffi Saccochi, MSc in Mathematics**, University of Brasilia. Thesis title: *Grupos central-por-finito: coberturas de grupos e un problema de P. Erdos*, with CNPq grant
- 2014 **Leandro Araújo Castro, MSc in Mathematics**, University of Brasilia. Thesis title: *Generalizando um teorema de P. Hall sobe grupos finitos-por-nilpotentes*, with CNPq grant.
 - José Vitor Paiva Miranda de Siqueira, "Iniciação científica em álgebra", undergraduate independent supervised study with UnB grant, University of Brasilia.

Editorial and review activities

1. Editorial activities

2021-pres Editorial Board Member for Matemática Contemporânea (a SBM journal) https://mc.sbm.org.br/a-revista/

2. International peer reviewed journal activities for the following journals:

2012- pres Bulletin of the Brazilian Mathematical Society, Journal of Algebra, Journal of Algebra and its Applications, Journal of Pure and Applied Algebra, Communications in Algebra, Glasgow Mathematical Journal, Communications in Mathematics, Journal of Group Theory, Archiv der Mathematik, Bollettino della Unione Matematica Italiana, International Journal of Group Theory, Rendiconti del Seminario Matematico della Università di Padova, Filomat (Univerzitet u Nishu)

3. Grant review activities

2015- pres CNPq -Brazil, CAPES - Brazil, FAPDF - Brazil

Research visits

Institution Universidade de Brasília (UnB), Brasilia, Brazil

Periods from 12th July to 4th August 2024 (3 weeks).

Institution Università degli Studi di Padova (UniPD), Padova, Italy

Periods from 8th to 14th November 2023 (1 week).

from 11^{th} to 23^{rd} May 2022 (2 weeks).

from 21st September to 5th October, from 15th to 20th December 2019 (3 weeks).

from March 2017 to January 2018 (11 months, sabbatical year).

from 10th January to 22nd January 2016 (2 weeks).

Institution Universidad del País Vasco (EHU/UPV), Bilbao, Spain

Periods from 2nd to 23rd May 2023 (3 weeks).

from 30th September to 22nd October 2017 (3 weeks).

from 10th January to 4th April 2010 (12 weeks).

from 27th September to 21st December 2009 (12 weeks).

from 7th March to 6th July 2009 (17 weeks).

from 2nd September to 21st December 2008 (16 weeks).

from 6th March to 30th June 2008 (17 weeks).

Administratives Duties

2022 - pres Member of the Scientific Board for the PhD Program in Mathematics, University of Parma, University of Ferrara and University of Modena and Reggio Emilia

2013 - 2023 **Postgraduate Mathematical Program faculty board member**, *Departamento de Matemática, Universidade de Brasília, Brazil*

2013 - current Jury Member, PhD defense:

- João Pedro Papalardo Azevedo, Thesis title: Commuting Probability in Compact Groups Universidade de Brasília- Brazil, 2023
- Wállef Januário Pereira da Silva, Thesis title: Grupos Solúveis e Pronilpotentes com Condições de Engel -Universidade de Brasília- Brazil, 2022
- Sara Raissa Silva Rodrigues, Thesis title: Sobre grupos finitos admitindo automorfismos coprimos -Universidade de Brasília, 2021
- \circ Iker de las Heras Kerejeta, Thesis title: Some topics on finite p-groups and pro-p groups EHU/UPV Universidad del País Vasco Spain, 2020
- Michell Lucena Dias, Thesis title: Partições Minimais de Grupos Universidade de Brasilia, 2019
- o Pedro Henrique Pereira Daldegan, Thesis title: Characteristically simple subgroups of quasiprimitive permutation groups Universidade Federal de Minas Gerais- Brazil, 2018
- Agenor Freitas de Andrade, Thesis title: Grupos com restrições em classes de conjugação verbal-Universidade de Brasilia, 2016
- Emerson Ferreira de Melo, Thesis title: Grupos Finitos com um Grupo Metacíclico de Automorfismos Universidade de Brasilia, 2015
- o *Raimundo de Araújo Bastos Júnior*, Thesis title: Condições de Engel em subgrupos verbais de grupos residualmente finitos Universidade de Brasilia, 2014
- Francisco Enio do Nascimento Lima, Thesis tiitle: Centralizadores em Grupos Localmente Finitos -Universidade de Brasilia, 2013

2015 - current Jury Member, PhD candidacy:

Genildo de Jesus Nery (Universidade de Brasilia, 2019), Hercules Carvalho Bezerra (Universidade de Brasilia, 2019), Sara Raissa Silva Rodrigues (Universidade de Brasilia, 2018), Danilo Sanção da Silveira (Universidade

de Brasilia, 2016), *Jhoel Estebany Sandoval Gutierrez* (Universidade de Brasilia, 2015), *Yerko Contreras Rojas* (Universidade de Brasilia, 2015)

2014 - current **Jury Member, Msc defense**:

André Pereira Araújo (Universidade de Brasilia, 2022), João Pedro Papalardo Azevedo (Universidade de Brasilia, 2020), Mateus Figueiredo de Souza (Universidade de Brasilia, 2020), Christe Hélida Moreira Montijo (Universidade de Brasilia, 2018), Sara Raissa Silva Rodrigues (Universidade de Brasilia, 2017), Alexandre Matos da Silva Pires de Moraes (Universidade de Brasilia, 2017), Regiane Lopes de Oliveira (Universidade de Brasilia, 2017), Jéssyca Cristine Lima de Souza (Universidade de Brasilia, 2016), Jucineide Silva Santos (Universidade Federal da Bahia, 2016), Daniel dos Santos Araújo (Universidade Federal de Goiás, 2016), Moacyr Rodrigues Miranda Junior (Universidade Federal da Bahia, 2015), Ana Carolina Moura Texeira (Universidade Federal da Bahia, 2015), Rebeca Chuffi Saccochi (Universidade de Brasilia, 2015), Leandro Araújo Castro (Universidade de Brasilia, 2014)

Outreach Activities

- 2024 'Il diritto di contare' Co-organizer, an event organized by the Department of Physics, Informatics and Mathematics, University of Modena and Reggio Emilia, 13/05/2024 Modena, https://www.dscg.unimore.it/sites/dip06/files/2024-05/Ildirittodicontare_locandina_cineforum.pdf
- 'Tavola Rotonda Paolo Ruffini, 1799' Co-organizer and Speaker, an event organized by the Department of Physics, Informatics and Mathematics, University of Modena and Reggio Emilia, 17/05/2022 Modena, https://www.magazine.unimore.it/site/home/notizie/articolo820062974.html
- 'Leonardo e a matemática' Co-organizer, a conference sponsored by the Italian Embassy in Brasilia, 15/04/2019 Brasilia, http://www.exatas.unb.br/ie-informa/leonardo-e-a-matematica-2/
- 'Matemática sorprendente/Surprising Mathematics' Co-organizer, a conference sponsored by the Italian Embassy in Brasilia, special guest: P. Oddifreddi, 24/10/2018 Brasilia, http://www.exatas.unb.br/ie-informa/surprising-mathematics-2/

Professional Memberships

- 2007 current INdAM, Instituto Nazionale di Alta Matematica GNSAGA (Italy), https://www.altamatematica.it/gnsaga/aderenti/aderenti-2023/
- 2011 current Iberian Network of Group Theory, (Spain)
- 2022 current **European Women in Mathematics**, https://www.europeanwomeninmaths.org/profile/cristina-acciarri/
- 2022 current UMI, Unione Matematica italiana (Italy), https://umi.dm.unibo.it

Other academic achievements and merits

- 23/02/2016 Italian PhD degree in Mathematics officially homologated by the Universidade de Brasília (Brazil) to the corresponding Brazilian PhD degree 'Doutor em Matemática'.
- 30/09/2010 Italian PhD degree in Mathematics officially homologated by the Universidad del País Vasco (Spain) to the corresponding Spanish PhD degree 'Doctor en Matemáticas'.

- 21/06/2010 Laurea Triennale and Laurea Specialistica (Italian first and second level degree) in Mathematics officially homologated by the Spanish Ministry for Education to the corresponding Spanish degree 'Licenciado en Matemáticas'.
- 07/12/2018 CELPE-BRAS Diploma in Portuguese as a Foreign Language (Proficiência em Língua Portuguesa para Estrangeiros) Level "Avançado" (Superior / Proficiency level) issued by Education Ministery-INEP- Brasil.
- 02/02/2010 DELE Diploma in Spanish as a Foreign Language (Diploma de Español como Lengua Extranjera) Level C2 (Superior / Proficiency level) issued by the Instituto Cervantes.

Languages

Italian native mother tongue

English fluent

Spanish fluent Diploma DELE European Level C2 – Instituto Cervantes
Portuguese fluent Diploma CELPE-Bras "Avançado", European Level C1

French basic

Computer skills

OS: Unix, Mac Os X, Windows Languages: PASCAL, Fortran 90, C++

Packages: GAP, Matlab, Mathematica, Typesetting: LATEX, Word

Maple

References

- 1. Pavel Shumyatsky, University of Brasilia, Brazil, email: pavel2040@gmail.com
- 2. Evgeny Khukhro, University of Lincoln, UK, email: khukhro@yahoo.co.uk
- 3. Andrea Lucchini, University of Padua, Italy, email: lucchini@math.unipd.it
- 4. Gustavo A. Fernández-Alcober, University of the Basque Country (Bilbao), Spain, email: gustavo.fernandez@ehu.eus