

Federico Alberto Rossi

Curriculum Vitae

<https://www.unipg.it/personale/federicoalberto.rossi/en/>

Personal Data

e-mail federicoalberto(a dot)rossi(at)unipg(another dot)it
ORCID 0000-0002-3170-0160
Web www.unipg.it/personale/federicoalberto.rossi/en/

Positions

- 10/04/2022-
NOW **Researcher (RTD-b)** at Department of Mathematics and Computer Sciences of Università degli Studi di Perugia. SSD MAT/03 Geometry (now SSD 01/MATH-02/B) (art. 24, comma 3, lett. b) Legge 30.12.2010 n. 240)
- 01/06/2020-
09/04/2022 **Researcher (RTD-a)** at Department of Mathematics and Applications of Università degli Studi di Milano - Bicocca. SSD MAT/03 Geometry (art. 24, comma 3, lett. a) Legge 30.12.2010 n. 240)
- 01/12/2019-
31/05/2020 **Research fellow** at Department of Mathematics and Applications of Università degli Studi di Milano - Bicocca. Research project title: "Homogeneous Einstein manifolds"
- 01/04/2015-
31/03/2019 **Research fellow** at Department of Mathematics and Applications of Università degli Studi di Milano - Bicocca. Research project title: "Obstructions to \mathbf{D} -structures and examples on Lie groups"
- 01/2010-
02/2013 Ph.D. in "Pure and Applied Mathematics" at Department of Mathematics and Applications of Università degli Studi di Milano - Bicocca. Ph.D. Thesis: " \mathbf{D} -complex structures: cohomological properties and deformations", advisors Prof. A. Tomassini and Prof. C. Medori (Università degli Studi di Parma), discussed 22/02/2013

Educations and Awards

- 04/05/2022 Appointed for the academic year 2021-22 as **Expert in the Subject (Linear Algebra and Geometry)**, course for the first year of the bachelor degree in Mathematics and the bachelor degree in Physics, at the Department of Mathematics and Applications of Università degli Studi di Milano - Bicocca (according to the minutes of the Didactic Course Council of Mathematics on 04/05/2022)
- 08/02/2022 "**Qualification aux fonctions de Maître de Conférence**, Section 25 - Mathématiques", issued by the "Ministere de l'Enseignement Superieur, de la Recherche et de l'Innovation" (France), (valid until 31/12/2026)

- 07/01/2020 Italian scientific qualification for the position of associate professor in Geometry and Algebra (**Abilitazione Scientifica Nazionale - II fascia, Settore Concorsuale 01/A2 - Geometria e Algebra**, now Gruppo Scientifico Disciplinare 01/MATH-02 Algebra and Geometry, SSD MATH-02/B Geometry) triennium 2018-2020, third quarter, valid until 07/01/2029
- 24/07/2015 **Qualification for teaching in “Mathematics and Psychics” at secondary schools (code A027, ex-code A049 - TFA ex art. 15 D.M.249/2010 Insegnanti)**, *Università degli Studi di Modena e Reggio Emilia*, Modena, Dipartimento di Scienze Fisiche, Informatiche e Matematiche, .
Qualification Thesis:
“Probabilità e statistica in due classi quinte liceo scientifico” (“Probability and Statistics in Two Fifth-Year Scientific High School Classes”), supervisor Prof. E. Dolera (*Università degli Studi di Modena e Reggio Emilia*), advisors Prof. A. Berra, Prof. A. Martelli, Prof. M. Santi
- 22/02/2013 **Doctor of Philosophy in Pure and Applied Mathematics**, *Department of Mathematics and Applications, Università degli Studi di Milano - Bicocca*, Milano, Ph.D. Science School, Ph.D. cycle XXV.
Ph.D. Thesis:
“D-complex structures: cohomological properties and deformations”, supervisors Prof. A. Tomassini and Prof. C. Medori (*Università degli Studi di Parma*)
- 14/09/2009 **Master degree in Pure and Applied Mathematics (Classe 45/S)**, *Università degli Studi di Parma*, Parma, mark 110/110 with Honour.
Research Thesis: “Metriche speciali su varietà complesse” (“Special metrics on complex manifolds”), supervisor Prof. A. Tomassini (*Università degli Studi di Parma*)
- 22/02/2006 **Bachelor degree in Mathematics (Classe 32)**, *Università degli Studi di Parma*, Parma, .
Thesis: “Strutture complesse su varietà” (“Complex structures on manifolds”), supervisor Prof. A. Tomassini (*Università degli Studi di Parma*)
- 2002 **High school diploma, Scientific school, Liceo Classico Scientifico “Ariosto-Spallanzani”**, Reggio Emilia, .
Indirizzo PNI (“National Informatics Curriculum”)

Teaching experiences

- 2023-2024 **Lecturer**, *Università degli Studi di Perugia*, Perugia.
“Geometry” (“Geometria”), 48h-6CFU
First-year course for bachelor degree in Civil and Environmental Engineering
- 2023-2024 **Lecturer**, *Università degli Studi di Perugia*, Perugia.
“Discrete Mathematics - Mod. I and II” (“Matematica Discreta - Modulo I e II”), 84h-12CFU
First-year course for bachelor degree in Informatics
- 2022-2023 **Lecturer**, *Università degli Studi di Perugia*, Perugia.
“Geometry” (“Geometria”), 48h-6CFU
First-year course for bachelor degree in Civil and Environmental Engineering
- 2022-2023 **Lecturer**, *Università degli Studi di Perugia*, Perugia.
“Discrete Mathematics - Mod. I” (“Matematica Discreta - Modulo I”), 47h-6CFU
First-year course for bachelor degree in Informatics

- 2022-2023 **Lecturer**, *Università degli Studi di Perugia, Perugia*.
 “Discrete Mathematics - Mod. II” (“Matematica Discreta - Modulo II”), 23h-3CFU, jointly with a M. Giulietti
 First-year course for bachelor degree in Informatics
- 2021-2022 **Lecturer**, *Università degli Studi di Milano - Bicocca, Milano*.
 “Geometry III” (“Geometria III”), 16h-2CFU jointly with A. Della Vedova
 Third-year course for bachelor degree in Mathematics
- 2021-2022 **Teaching assistant**, *Università degli Studi di Milano - Bicocca, Milano*.
 “Geometry I” (“Geometria I”), 24h
 First-year course for bachelor degree in Mathematics
- 2021-2022 **Teaching assistant**, *Università degli Studi di Milano - Bicocca, Milano*.
 “Linear Algebra and Geometry” (“Algebra Lineare e Geometria”), 24h
 First-year course for bachelor degree in Mathematics and for bachelor degree in Physics
- 2020-2021 **Teaching assistant**, *Università degli Studi di Milano - Bicocca, Milano*.
 “Geometry I” (“Geometria I”), 24h
 First-year course for bachelor degree in Mathematics
- 2020-2021 **Teaching assistant**, *Università degli Studi di Milano - Bicocca, Milano*.
 “Linear Algebra and Geometry” (“Algebra Lineare e Geometria”), 24h
 First-year course for bachelor degree in Mathematics and for bachelor degree in Physics
- 2019-2020 **Teaching assistant**, *Università degli Studi di Modena e Reggio Emilia, Reggio Emilia*.
 “Mathematical Analysis” (“Analisi Matematica”), 27h
 First-year course for bachelor degree in Management Engineering
- 2018-2019 **Teaching assistant**, *Università degli Studi di Milano - Bicocca, Milano*.
 “Linear Algebra and Geometry” (“Algebra Lineare e Geometria”), 24h
 First-year course for bachelor degree in Mathematics and for bachelor degree in Physics
- 2018-2019 **Teaching assistant**, *Università degli Studi di Modena e Reggio Emilia, Reggio Emilia*.
 “Mathematical Analysis” (“Analisi Matematica”), 27h
 First-year course for bachelor degree in Management Engineering
- 2018-2019 **Tutor**, *Università degli Studi di Milano - Bicocca, Milano*.
 “Linear Algebra and Geometry” (“Algebra Lineare e Geometria”), 20h
 First-year course for bachelor degree in Mathematics and for bachelor degree in Physics
- 2017-2018 **Teaching assistant**, *Università degli Studi di Milano - Bicocca, Milano*.
 “Geometry I” (“Geometria I”), 24h
 First-year course for bachelor degree in Mathematics
- 2017-2018 **Teaching assistant**, *Università degli Studi di Milano - Bicocca, Milano*.
 “Linear Algebra and Geometry” (“Algebra Lineare e Geometria”), 24h
 First-year course for bachelor degree in Mathematics and for bachelor degree in Physics
- 2017-2018 **Tutor**, *Università degli Studi di Milano - Bicocca, Milano*.
 “Linear Algebra and Geometry” (“Algebra Lineare e Geometria”), 20h
 First-year course for bachelor degree in Mathematics and for bachelor degree in Physics
- 2016-2017 **Teaching assistant**, *Università degli Studi di Milano - Bicocca, Milano*.
 “Geometry I” (“Geometria I”), 24h
 First-year course for bachelor degree in Mathematics

- 2016-2017 **Teaching assistant**, *Università degli Studi di Milano - Bicocca*, Milano.
 “Linear Algebra and Geometry” (“Algebra Lineare e Geometria”), 24h
 First-year course for bachelor degree in Mathematics and for bachelor degree in Physics
- 2016-2017 **Tutor**, *Università degli Studi di Milano - Bicocca*, Milano.
 “Linear Algebra and Geometry” (“Algebra Lineare e Geometria”), 20h
 First-year course for bachelor degree in Mathematics and for bachelor degree in Physics
- 2015-2016 **Teaching assistant**, *Università degli Studi di Milano - Bicocca*, Milano.
 “Geometry I” (“Geometria I”), 24h
 First-year course for bachelor degree in Mathematics, 24h
- 2015-2016 **Teaching assistant**, *Università degli Studi di Milano - Bicocca*, Milano.
 “Linear Algebra and Geometry” (“Algebra Lineare e Geometria”), 24h
 First-year course for bachelor degree in Mathematics and for bachelor degree in Physics
- 2012 **Teaching assistant**, *Università degli Studi di Milano - Bicocca*, Milano.
 Second-year course “Mathematics III” (“Matematica III”), for bachelor degree in Materials Science
- 2012 **Teaching assistant**, *Università degli Studi di Milano - Bicocca*, Milano.
 preparatory course “Mathematics recalls” (“Richiami di Matematica”) (for bachelor degree in all the Science degree)
- 2012 **Collaborator**, *Università degli Studi di Milano - Bicocca*, Milano.
 Supporting Information Technology for project “Lauree scientifiche”
- 2010 **Tutor**, *Università degli Studi di Milano - Bicocca*, Milano.
 Second-year course “Geometry II” (“Geometria II”), for bachelor degree in Mathematics
- 2009 **Tutor**, *Università degli Studi di Parma*, Parma.
 Second-year course “Surfaces and Curves” (“Curve e Superfici”), for bachelor degree in Mathematics

Research Activity

Projects' Membership

- 2023-2024 Participation in the INdAM-GNSAGA research project: “Algebraic Curves and Their Applications” (“Curve algebriche e loro applicazioni”). Coordinator: M. Timpanella. Participants: A. Dionigi, B. Gatti, F.A. Rossi
- 2022-NOW Participation in the research programmes “Departmental Research Operating Fund” FUNZ 2022 and “University Research Fund” FRA 2024
- 2021-2022 Member of *Matematita*, an Interuniversity Research Center for the Communication and Informal Learning of Mathematics
- 2020-2022 Participant research program FAR 2020 (Fondi di Ricerca di Ateneo “Geometria differenziale”) “Differential Geometry”, scientific manager Prof. D. Conti (*Università degli Studi di Milano - Bicocca*, Department of Mathematics and Applications)
- 2020-NOW Member of the UMI group “Matematica per l'Intelligenza artificiale e il Machine Learning” (“Mathematics for Artificial Intelligence and Machine Learning”)
- 2019-2020 Participant research program “Varietà omogenee di Einstein” (“Homogeneous Einstein manifolds”), scientific manager Prof. D. Conti (*Università degli Studi di Milano - Bicocca*)

- 2018-2018 Participant research program PRIN 2015 “Varietà reali e complesse: geometria, topologia e analisi armonica” (“Real and complex manifolds: geometry, topology and harmonic analysis”), national scientific manager Prof. F. Ricci (Pisa unit), local scientific manager Prof. S. Meda (Università degli Studi di Milano - Bicocca)
- 2015-2018 Participant research program FAR 2015, FAR 2016 and FAR 2017 (Fondi di Ricerca di Ateneo “Geometria e Topologia”) “Geometry and Topology”, scientific manager Prof. R. Paoletti (Università degli Studi di Milano - Bicocca, Department of Mathematics and Applications)
- 2010-NOW Member group GNSAGA, (2010-2016: Section “Complex geometry and topology”, 2016-NOW: Section “Differential Geometry”), of Istituto Nazionale di Alta Matematica “F. Severi” (INdAM)
- 2011-NOW Member of European Mathematics Society (EMS)
- 2010-NOW Member of Unione Matematica Italiana (UMI)
- 2012-2015 Participant research program PRIN 2010/2011 “Varietà Reali e Complesse: geometria topologia e analisi armonica” (“Real and complex manifolds: geometry, topology and harmonic analysis”), national scientific manager Prof. F. Ricci (Pisa unit), local scientific manager Prof. S. Meda (Università degli Studi di Milano - Bicocca)
- 2010-2012 Participant research program FAR 2010 and FAR 2011 (Fondi di Ricerca di Ateneo “Geometria e Topologia”) “Geometry and Topology”, scientific manager Prof. R. Paoletti (Università degli Studi di Milano - Bicocca, Department of Mathematics and Applications)

Projects and Fund Responsibility

- 2021 I applied as Principal Investigator for a FIS 2021 project (“Fondo Italiano per la Scienza”, i.e. “Italian Fund for Science”), “Starting Grant” line, titled “Homogeneous indefinite Einstein metrics”. The project passed all evaluation phases. Although deemed eligible, it did not receive funding due to a lack of available funds. (Unfunded Project)
- 2018-2021 Manager of Grant “Young Talent Award” (Premio Giovani Talenti). (3500 Euro)
- 2015-2019 Principal investigator of the research project “Obstruction to \mathbf{D} -structures and examples on Lie groups” (“Ostruzioni alle \mathbf{D} -strutture ed esempi su gruppi di Lie”), Department of Mathematics and Applications, Università degli Studi di Milano - Bicocca, from 01/04/2015 to 31/03/2019

Talks

- 2024 27 May, Kyiv: “Einstein Solvmanifolds NOT based on Nilsolitons”, at the International scientific conference “Algebraic and geometric methods of analysis”, Kyiv (Ukraine)
- 2023 11 September, Milano: “Exploring Indefinite Einstein Solvmanifolds and Compatible Geometric Structures”, at the Workshop “Geometria in Bicocca 2023”, INVITED TALK, Università degli Studi di Milano - Bicocca, Milano (MI - Italy)

- 2023 8 February, Perugia: "Einstein Pseudo-Riemannian metrics on Solvable Lie Groups", at the V Workshop of the Department of Mathematics and Computer Science "Young researchers DMI", Department of Mathematics and Computer Science, Università degli Studi di Perugia, Perugia (PG - Italy)
- 2023 24 January, Trento: "Pseudo-Sasaki-Einstein extensions of pseudo-Kähler Lie algebras", at the conference "Cohomology of Complex Manifolds and Special Structures - III", INVITED TALK, Trento (TN - Italy)
- 2022 February, Cogne: "Uniqueness ad-invariant metric and nonnice Lie algebras", at "Informal Geometry Workshop in Paradiso 2022", Cogne (AO - Italy) – Not done for personal reasons
- 2022 10 January, Parma: "New Pseudo-Sasaki and cosymplectic Einstein Metrics", at the conference "Recent advances in Complex and Symplectic Geometry", INVITED TALK, Università degli Studi di Parma, Parma (PR - Italy)
- 2021 10 September, Covilhã: "Indefinite Nilsolitons and Einstein Solvmanifolds", at "XXIX International Fall Workshop in Geometry and Physics", CMA-UBI, Covilhã (Portugal)
- 2021 5 July, Levico Terme: "A Way to Construct Special Einstein Pseudo-Riemannian metrics on Solvable Lie Groups", at the conference "Cohomology of Complex Manifolds and Special Structures - II", INVITED TALK, CIRM, Levico Terme (TN)
- 2021 28 May, Milano: "Uniqueness of ad-invariant metrics", at Cycle of "Seminari AI@Bicocca da asporto", organized by Università degli Studi di Milano - Bicocca, Milan (MI - Italy)
- 2021 30 April, Parma: "*Solitary* Lie algebras", at Cycle of "Geometry Seminars - Unipr" ("Seminari di Geometria - Unipr"), organized by Università degli Studi di Parma, Parma (PR - Italy)
- 2021 18 February, Niigata: "Diagram involutions and homogeneous Ricci-flat metrics", at "6th Workshop "Complex Geometry and Lie Groups"", Niigata (Japan)
- 2019 18 July, Milano: "Construction of nice nilpotent Lie algebras and Ricci-flat metrics", INVITED TALK, Dipartimento di Matematica e Applicazioni, Università degli Studi di Milano - Bicocca (MI)
- 2019 1 February, Zaragoza: "Classification of nice nilpotent Lie algebras and construction of Einstein and Ricci-flat pseudoriemannian metrics", INVITED TALK, Departamento de Matemáticas, Universidad de Zaragoza, Zaragoza (Spain)
- 2018 26 September, Levico: "Riemannian and pseudo-Riemannian nilsolitons", at the workshop "Progressi Recenti in Geometria Reale e Complessa - XI", CIRM, Levico Terme (TN)
- 2018 12 June, Firenze: "Construction of nice nilpotent Lie algebras and Einstein metrics", at "The 5th Workshop Complex Geometry and Lie Groups", Firenze (FI - Italy)
- 2018 22 January, Cogne: "Einstein nilpotent Lie groups", at "Informal Geometry Workshop in "Paradiso"", Cogne (AO - Italy)
- 2017 11 December, Parma: "Metriche Einstein invarianti su gruppi di Lie", INVITED TALK, Dipartimento di Scienze Matematiche, Fisiche e Informatiche, Università degli Studi di Parma

- 2017 19 April, Reggio Emilia: “Geometrie non-Euclidee”, educational talk for high school students, Liceo Classico-Scientifico “Ariosto-Spallanzani”, Reggio Emilia
- 2017 7 April, Torino: “The Ricci tensor of almost parahermitian manifolds”, at “Differential Geometry Days”, Dipartimento di Matematica “Giuseppe Peano”, Università degli Studi di Torino
- 2017 10 February, Milano: “Left-invariant Einstein metrics on Nilmanifolds”, at “Insalate di Matematica”, Department of Mathematics and Applications, Università degli Studi di Milano - Bicocca
- 2013 22 February, Milano: “ \mathbf{D} -complex structures: cohomological properties and deformations”, PhD discussion, Department of Mathematics and Applications, Università degli Studi di Milano - Bicocca
- 2012 12 July, Milano: “Comologia di Varietà \mathbf{D} -complesse”, at “I Semiseminari 2011-2012”, Department of Mathematics and Applications, Università degli Studi di Milano - Bicocca
- 2012 22 May, Parma: “Introduzione alle Strutture \mathbf{D} -Complesse, III”, XI talk of the series “Seminarii di Geometria”, Dipartimento di Matematica, Università degli Studi di Parma
- 2012 8 May, Parma: “Introduzione alle Strutture \mathbf{D} -Complesse, II”, X talk of the series “Seminarii di Geometria”, Dipartimento di Matematica, Università degli Studi di Parma
- 2012 28 February, Parma: “Introduzione alle Strutture \mathbf{D} -Complesse, I”, IX talk of the series “Seminarii di Geometria”, Dipartimento di Matematica, Università degli Studi di Parma
- 2012 11 January, Parma: “Introduzione alla geometria generalizzata, I”, at “Seminario degli ex-studenti di Parma, seconda edizione”, Dipartimento di Matematica, Università degli Studi di Parma
- 2011 16 September, Bologna: “Deformazioni di D-strutture ed esempi”, at “XIX Congresso dell’Unione Matematica Italiana”, sezione Geometria Complessa, UMI, Bologna
- 2010 21 December, Parma: “Geometria Para-complessa: un’introduzione”, at “Seminario degli ex-studenti di Parma”, Dipartimento di Matematica, Università degli Studi di Parma
- 2010 10 December, Milano: “Strutture Para-complesse”, talk, Department of Mathematics and Applications, Università degli Studi di Milano - Bicocca
- 2010 8 April, Milano: “Metriche speciali su nilvarietà complesse”, talk of the series “I Semiseminari 2010-2011”, Department of Mathematics and Applications, Università degli Studi di Milano - Bicocca

Video Poster Session

- 2022 March 7-11: “From indefinite nilsolitons to Einstein solvmanifolds”, video-poster as part of the “VII Iberoamerican Meeting on Geometry, Mechanics and Control”, Bahía Blanca (Argentina)

2020 November-December: "Pseudo-Riemannian Nilsolitons: Problems and Examples", video-poster as part of the "15th International Young Researchers Workshop on Geometry, Mechanics, and Control", Utrecht (Netherlands)

Poster Session

2018 September, Sevilla: "Construction of nice nilpotent Lie algebras and Einstein metrics", accepted at the "XXVII International Fall Workshop on Geometry and Physics", Sevilla (Spain) – Not done for personal reasons

Organizational Experiences

- 2020 Co-organizer, jointly with Sonia Brivio, Diego Conti, Alberto Della Vedova, Filippo Favale and Roberto Paoletti, of the workshop "Geometria in Bicocca 2020", Department of Mathematics and Applications, Università degli Studi di Milano - Bicocca, originally planned for September 24-25, suspended for COVID-19 pandemic
- 2018 Co-organizer, jointly with Filippo Favale, of the workshop "Joint Algebraic & Differential Encounters", Department of Mathematics and Applications, Università degli Studi di Milano - Bicocca, 18 June
- 2018 Co-organizer, jointly with Sonia Brivio, Diego Conti, Alberto Della Vedova, Filippo Favale and Roberto Paoletti, of the workshop "Geometria in Bicocca 2018", Department of Mathematics and Applications, Università degli Studi di Milano - Bicocca, 31 May-01 June
- 2018 Co-organizer, jointly with Amedeo Altavilla (UNIROMA2) and Nicoletta Tardini (UNIFI), of the seminars "Seminario degli ex-studenti - 3a edizione", Dipartimento di Scienze Matematiche, Fisiche e Informatiche, Università degli Studi di Parma, 8-9 January
- 2012 Co-organizer, jointly with Gennaro Amendola, Francesco Bastianelli, Diego Conti, Gianni Manno and Jasmin Raissy, of the workshop "Geometria in Bicocca 2012", Department of Mathematics and Applications, Università degli Studi di Milano - Bicocca, 10-11 May
- 2011-2012 Co-organizer of the seminars series "I Semiseminari 2011-2012", informal research seminars of the Ph.D. students of Department of Mathematics and Applications (Università degli Studi di Milano - Bicocca)

Academic Collaborations

- 2022 Invited and hosted Prof. V. del Barco at Department of Mathematics and Computer Science, Università degli Studi di Perugia, Perugia (PG - Italy), between July 17 and July 29 2022
- 2022 Scientific collaboration with Prof. D. Conti, Prof. V. del Barco, at Department of Mathematics and Applications, Università degli Studi di Milano - Bicocca (MI), 11-15 Luglio 2022
- 2019 Hosted at Département de Mathématiques Faculté des Sciences d'Orsay, Université Paris-Suds, supervisor: Prof. A. Moroianu and Dott. V. del Barco, 20-22 March
- 2019 Hosted at Departamento de Matemáticas, Universidad de Zaragoza, supervisor: Prof. L. Ugarte, 28 Gennaio-08 Febbraio

Awards and Grants

- 2018 Winner of the first prize at “Young Talent Award” (“Premio Giovani Talenti”) of Università degli Studi di Milano - Bicocca joint with Accademia Nazionale dei Lincei – Edizione 2018 (Sector 1¹). The Award aims to recognize the quality, originality and impact of the scientific production of unstructured researchers and encourage their training through international mobility actions
- 2009 Winner of a Ph.D. scholarship in Mathematics at Università di Pisa (rejected) and at Università di Milano - Bicocca (accepted)
- 2009 Master degree with Honour in Pure and Applied Mathematics (Classe 45/S) Università degli Studi di Parma
- 2003 Award as “Best Student” (“Miglior Studente”) of the bachelor degree in Mathematics, academic year 2002/2003
- 2002 Winner of a scholarship by Istituto Nazionale di Alta Matematica “F. Severi” (INdAM) for studying Mathematics

Other Research Activity

- 2018-NOW Referee for Mathematics peer-review Journal (Revista de la Unión Matemática Argentina, Tsukuba Journal of Mathematics, Punjab University Journal of Mathematics, Mathematical Methods in the Applied Sciences, Quaestiones Mathematicae, Rivista di Matematica dell'Università di Parma, Annali dell'Università di Ferrara)
- 2015-NOW Review for Mathematical Reviews (MatSciNet) of America Mathematical Society since 01/04/2015
- 2015-NOW Review for Zentralblatt MATH (zbMATH) of European Mathematical Society since 01/04/2015

Students

- 2022-2023 Two students wrote the Bachelor thesis in Mathematics for which I was co-supervisor

■ Papers and Preprint

Published Papers

- [1] D. Conti, F. A. Rossi, and R. Segnan Dalmaso. “A Construction of Einstein Solvmanifolds not Based on Nilsolitons”. In: *Transformation Groups* (2024). DOI: 10.1007/s00031-024-09864-1.
- [2] D. Conti, F. A. Rossi, and R. Segnan Dalmaso. “Erratum to: “Pseudo-Riemannian Sasaki solvmanifolds””. In: *J. Korean Math. Soc.* 60.5 (2023), pp. 1135–1136. ISSN: 0304-9914. DOI: 10.4134/JKMS.j230073.
- [3] D. Conti, F. A. Rossi, and R. Segnan Dalmaso. “Pseudo-Kähler and pseudo-Sasaki Einstein solvmanifolds”. In: *Ann. Global Anal. Geom.* 63.3 (2023). Id/No 25, p. 26. ISSN: 0232-704X. DOI: 10.1007/s10455-023-09894-0.
- [4] D. Conti, F. A. Rossi, and R. Segnan Dalmaso. “Pseudo-Riemannian Sasaki solvmanifolds”. In: *J. Korean Math. Soc.* 60.1 (2023), pp. 115–141. ISSN: 0304-9914. DOI: 10.4134/JKMS.j220232.

¹Includes Mathematics and Computer Science (Area 01) and Industrial and Information Engineering (Area 09)

- [5] D. Conti and F. A. Rossi. “Indefinite nilsolitons and Einstein solvmanifolds”. In: *J. Geom. Anal.* 32.3 (2022), p. 88. DOI: 10.1007/s12220-021-00850-7.
- [6] D. Conti and F. A. Rossi. “Nice pseudo-Riemannian nilsolitons”. In: *J. Geom. Phys.* 173 (2022), p. 104433. ISSN: 0393-0440. DOI: 10.1016/j.geomphys.2021.104433.
- [7] F. A. Rossi. “New special Einstein pseudo-Riemannian metrics on solvable Lie algebras”. In: *Riv. Mat. Univ. Parma (N.S.)* 13.2 (2022). Proceedings of the meeting, Cohomology of Complex Manifolds and Special Structures II, Levico Terme (Trento), July 5-9, 2021, pp. 449–479. ISSN: 0035-6298. URL: rivista.math.unipr.it/vols/2022-13-2/08-rossi.html.
- [8] D. Conti, V. del Barco, and F. A. Rossi. “Diagram involutions and homogeneous Ricci-flat metrics”. In: *Manuscripta Math.* 165.3-4 (2021), pp. 381–413. ISSN: 0025-2611. DOI: 10.1007/s00229-020-01225-y.
- [9] D. Conti and F. A. Rossi. “Indefinite Einstein metrics on nice Lie groups”. In: *Forum Mathematicum* 32.6 (2020), pp. 1599–1619. DOI: 10.1515/forum-2020-0049.
- [10] D. Conti and F. A. Rossi. “Construction of nice nilpotent Lie groups”. In: *Journal of Algebra* 525 (2019), pp. 311–340. ISSN: 0021-8693. DOI: 10.1016/j.jalgebra.2019.01.020.
- [11] D. Conti and F. A. Rossi. “Einstein nilpotent Lie groups”. In: *J. Pure Appl. Algebra* 223.3 (2019), pp. 976–997. ISSN: 0022-4049. DOI: 10.1016/j.jpaa.2018.05.010.
- [12] D. Conti and F. A. Rossi. “Ricci-flat and Einstein pseudoriemannian nilmanifolds”. In: *Complex Manifolds* 6.1 (2019), pp. 170–193. ISSN: 2300-744. DOI: 10.1515/coma-2019-0010.
- [13] D. Conti and F. A. Rossi. “The Ricci tensor of almost parahermitian manifolds”. In: *Ann. Global Anal. Geom.* 53.4 (June 2018), pp. 467–501. ISSN: 1572-9060. DOI: 10.1007/s10455-017-9584-y.
- [14] D. Angella, M. G. Franzini, and F. A. Rossi. “Degree of non-Kählerianity for 6-dimensional nilmanifolds”. In: *Manuscripta Math.* 148.1-2 (2015), pp. 177–211. ISSN: 0025-2611. DOI: 10.1007/s00229-015-0734-x.
- [15] D. Angella and F. A. Rossi. “Cohomology of \mathbf{D} -complex manifolds”. In: *Differential Geom. Appl.* 30.5 (2012), pp. 530–547. ISSN: 0926-2245. DOI: 10.1016/j.difgeo.2012.07.003.
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Other topics

- Some articles have been completed thanks to the use of calculation software (Mathematica, Sage, Maple), which I can efficiently and productively use

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