

Beatrice Brienza

 **Work** : Via Carlo Alberto, 10 , 10123, Torino, Italy

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Gender: Female **Date of birth**: 10/12/1998 **Nationality**: Italian

EDUCATION AND TRAINING

[01/11/2022 – 15/01/2026] **PhD in Pure and Applied Math**

Politecnico di Torino

City: Torino | **Country**: Italy | **Field(s) of study**: Complex Geometry

Supervisor: Professor Anna Fino

Co-Supervisor: Professor Gueo Grantcharov

[09/2020 – 19/07/2022] **Master degree in Mathematics**

University of Turin

City: Torino | **Country**: Italy | | **Final grade**: Cum Laude With Honors | **Thesis**: On an example of Generalized Kähler mapping torus

Thesis advisor: Professor Anna Fino

[09/2017 – 07/2020] **Bachelor degree in Pure Mathematics**

University of Turin

City: Torino | **Country**: Italy | | **Final grade**: Cum Laude | **Thesis**: Sul Teorema di Nielsen-Schreier, due dimostrazioni a confronto

Thesis advisor: Professor Alberto Albano

[2012 – 2017] **High School Diploma**

Scientific high school Gaetano Salvemini

City: Bari | **Country**: Italy | | **Final grade**: 100/100

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING C1 **READING** C1 **WRITING** B2

SPOKEN PRODUCTION B2 **SPOKEN INTERACTION** B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

PUBLICATIONS

[2025] [Holonomy of the Obata connection on Joyce hypercomplex manifolds](#)

Pre-print

Authors: B. Brienza, U. Fowdar, G. Gentili, L. Vezzoni

[2025] [Holonomy of the Obata connection on 2-step hypercomplex nilmanifolds](#)

Pre-print

Authors: A. Andrada, M.L. Barberis and B. Brienza | **Journal Name**: To appear in Bull. Lond. Math. Soc.

[2025] [On the structure of compact strong HKT manifolds](#)

Pre-print

Authors: B. Brienza, A. Fino, G. Grantcharov and M. Verbitsky | **Journal Name**: To appear in Comm. Math. Phys.

[2025] [A mapping tori construction of strong HKT and generalized HyperKähler manifolds](#)

Authors: B. Brienza, A. Fino, G. Grantcharov | **Volume, Issue and Pages**: "Real and Complex Geometry - in Honour of Paul Gauduchon" | **Publisher**: Springer

Link: <https://link.springer.com/book/10.1007/978-3-031-92297-8>

- [2024] [Strong Kähler with torsion solvable Lie algebras with codimension two nilradical](#)
Authors: B. Brienza and A. Fino | Journal Name: Math. Nachr. | Volume, Issue and Pages: 1–25
- [2024] [SKT and CYT manifolds with parallel Bismut torsion](#)
Authors: B. Brienza, A. Fino, G. Grantcharov | Journal Name: Proc. R. Soc. Edinb. A: Math. | Volume, Issue and Pages: 1-26
- [2025] [Generalized Kähler Manifolds via Mapping Tori](#)
Authors: B. Brienza, A. Fino | Journal Name: J. Symp. Geom. | Volume, Issue and Pages: 385-422

INVITED SEMINARS

- [11/02/2026] **Holonomy of the Obata connection on Joyce hypercomplex manifolds**
Institute of Mathematics and Informatics (IMI) at the Bulgarian Academy of Sciences
- [06/02/2026] **Holonomy of the Obata connection on Joyce hypercomplex manifolds**
Seminari di Geometria, Dipartimento di scienze Matematiche, Fisiche e Informatiche, Università di Parma
- [29/01/2026] **Holonomy of the Obata connection on two-step hypercomplex Lie algebras**
DIFFERENTIAL and (HYPER)COMPLEX GEOMETRY, Ferrara
Link: <https://docente.unife.it/cinzia.bisi/differential-and-hyper-complex-geometry>
- [22/01/2026] **Strong HKT manifolds**
[String Geometry Online Seminars](#)
Link: <https://www.youtube.com/watch?v=AskPRL-C1XU>
- [30/10/2025] **Holonomy of the Obata connection on Joyce hypercomplex manifolds**
Talks in the seminar of the IGT at the University of Stuttgart.
Link: <https://www.igt.uni-stuttgart.de/dokumente/poster-oberseminar/Brienza.pdf>
- [17/09/2025 – 19/09/2025] **Holonomy of the Obata connection on Joyce hypercomplex manifolds**
Recent advances in complex and Kahler geometry, Cagliari
Link: <https://sites.google.com/view/rackgcagliari>
- [13/06/2025] **The holonomy of the Obata connection on Joyce's hypercomplex manifolds**
Tarde compleja, University of Cordoba, Argentina
- [08/05/2025] **Some properties of compact strong HKT manifolds**
Seminarios del Grupo de Geometría Diferencial Facultad de Matemática, Astronomía, Física y Computación de la Universidad Nacional de Córdoba
Link: <https://sites.google.com/prod/view/seminariogeometriafamaf>
- [28/04/2025] **The Obata connection on Joyce's hypercomplex manifolds**
Seminários at Institute of Mathematics Pura e Aplicada (IMPA), Rio de Janeiro, Brasil
Link: <https://impa.br/seminarios/>
- [27/04/2025] **An introduction to the Bismut connection**
Seminário de geometria, Universidad Federal de Río de Janeiro (UFRJ), Rio De Janeiro

- [16/04/2025] **Some remarks on BHE and Strong HKT manifolds**
Seminários at Institute of Mathematics Pura e Aplicada (IMPA), Rio de Janeiro, Brasil
Link: <https://impa.br/seminarios/>
- [31/03/2025] **Bismut Hermitian Einstein and strong HKT manifolds**
Informal Geometry Workshop in Paradiso, Cogne (Aosta)
Link: <https://sites.google.com/view/igwp2025/home-page?authuser=0>
- [19/02/2025] **Bismut Hermitian Einstein and strong HKT manifolds**
Complex geometry at Aarhus University, Aarhus
Link: <https://conferences.au.dk/cogeomau>
- [10/12/2024] **Some Remarks on the BHE condition**
Seminar Informal de Noutăți Geometrice, University Alexandru Ioan Cuza of Iasi, România (online)
Link: <https://sites.google.com/view/marian-ioan-munteanu/home/research/sing?authuser=0>
- [25/11/2024] **La geometria della connessione di Bismut**
Ciclo di Seminari Math-lab: cycle of seminars for un-graduated students of Mathematics at University of Torino
Link: <https://www.mathematics-phdseminars.unito.it/past-seminars>
- [07/11/2024] **Some Remarks on the BHE condition**
Joint research seminar UNIBA-POLIBA on Geometry and Algebra, Bari
Link: <https://sites.google.com/view/sga-poliuniba>
- [27/10/2024 – 01/11/2024] **Generalized Kahler manifolds via mapping tori**
The international conference on differential geometry (ICDG), Fez, Marocco
Link: <https://www.beatricebrienza.com/talks-and-conferences>
- [17/10/2024 – 17/10/2024] **Some remarks on the BHE condition**
Seminarios del Grupo de Geometría Diferencial Facultad de Matemática, Astronomía, Física y Computación de la Universidad Nacional de Córdoba (online)
Link: <https://sites.google.com/view/seminariogeometriafamaf/inicio?authuser=0>
- [22/09/2024 – 27/09/2024] **Generalized Kahler manifolds via mapping tori**
Workshop on generalized complex structures and homological methods: Hamburg
Link: <https://www.conferences.uni-hamburg.de/event/464/>
- [08/04/2024 – 10/04/2024] **CYT and SKT manifolds with Parallel Bismut Torsion**
Differential Geometry Workshop in Lericci, Lericci
Link: <https://sites.google.com/view/dgwlerici?usp=sharing>
- [16/02/2024 – 18/02/2024] **CYT and SKT manifolds with Parallel Bismut Torsion**
Symmetry and Geometry in South Florida, Florida International University, MIAMI
Link: <https://sites.google.com/view/sgsf-2024/home-page?authuser=0>

[18/01/2024] **CYT and SKT manifolds with Parallel Bismut Torsion**

Seminari di Geometria, Dipartimento di scienze Matematiche, Fisiche e Informatiche, Università di Parma

Link: <https://smfi.unipr.it/notizie/giovedi-18-gennaio-ore-17-seminario-dottssa-beatrice-brienza-cyt-and-skt-manifolds-parallel>

[03/07/2023 – 07/07/2023] **An introduction to Closed G2 structures**

British Isles Graduate Workshop (BIGW) IV: Geometric flows and related topics

TEACHINGS

[10/2021 – 01/2022] **Tutor of the lectures Linear Algebra and Geometry**

Department of mathematics of Finance and Insurance, University of Torino

[10/2020 – 01/2021] **Tutor of the lectures Geometry and Linear Algebra I A**

Department of Physics, University of Torino

VISITING PERIODS

[08/02/2026 – 10/03/2026] **Institute of Mathematics and Informatics (IMI) at the Bulgarian Academy of Sciences**

Invited by Professor Gueo Grantcharov

[28/10/2025 – 31/10/2025] **University of Stuttgart**

Invited by Prof. Uwe Semmelmann

[03/05/2025 – 03/07/2025] **Universidad Nacional de Córdoba, Cordoba**

Invited by Professor Adrian Andrada

[17/04/2025 – 03/05/2025] **Instituto de Matemática Pura e Aplicada (IMPA), Rio de Janeiro**

Invited by Professor Misha Verbitsky

[01/02/2024 – 01/03/2024] **Florida Intenational University, MIAMI**

Invited by Professor Anna Fino

ORGANIZED EVENTS

[2026 – Current] **Geometry and TACoS**

Link: <https://sites.google.com/view/geometry-and-tacos/home-page>

[2026 – Current] **String Geometry online Seminars**

Link: <https://sites.google.com/view/sgos/home?authuser=1>

[18/11/2024] **PhD Day**

Palazzo Campana, University of Torino (Italy)

Link: <https://sites.google.com/view/phday/home?authuser=0>

GRANTS

[25/05/2026 – 29/05/2026] **Grant from ICTP (400€) to partecipate at the International Conference on Complex and Differential Geometry**

Link: <https://indico.ictp.it/event/11144/>

[2025 – 2026] **"INdAM - GNSAGA Project", codice CUP E53C24001950001 (2000€)**

Generalized Kahler structures on solvmanifolds

