



Beatrice Brienza

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Work: Via Carlo Alberto, 10 , 10123 Torino (Italy)

EDUCATION AND TRAINING

PhD in Pure and Applied Math

Politecnico di Torino [01/11/2022 – Current]

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

Supervisor: Professor Anna Fino

Co-Supervisor: Professor Gueo Grantcharov

Master degree in Mathematics

University of Turin [09/2020 – 19/07/2022]

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

Thesis advisor: Professor Anna Fino

Bachelor degree in Pure Mathematics

University of Turin [09/2017 – 07/2020]

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

Thesis advisor: Professor Alberto Albano

High School Diploma

Scientific high school Gaetano Salvemini [2012 – 2017]

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

PUBLICATIONS

[2025]

A mapping tori construction of strong HKT and generalized HyperKähler manifolds

B. Brienza, A. Fino, G. Grantcharov, A mapping tori construction of strong HKT and generalized HyperKähler manifolds. To be published in the volume "Real and Complex Geometry - in Honour of Paul Gauduchon", Springer, 2025.

[2024]

Strong Kähler with torsion solvable Lie algebras with codimension two nilradical

B. Brienza and A. Fino, Strong Kähler with torsion solvable lie algebras with codimension 2 nilradical, Math. Nachr. (2024), 1–25.

[2024]

SKT and CYT manifolds with parallel Bismut torsion

B. Brienza, A. Fino, G. Grantcharov, CYT and SKT manifolds with parallel Bismut torsion, Proc. R. Soc. Edinb. A: Math. (2024), 1–26

[2023]

Generalized Kähler Manifolds via Mapping Tori

B. Brienza, A. Fino. Generalized Kähler Manifolds via Mapping Tori. To appear in Journal of Symplectic Geometry

INVITED SEMINARS

[31/03/2025]

Bismut Hermitian Einstein and strong HKT manifolds

[Informal Geometry Workshop in Paradiso](#), Cogne (Aosta)

[slides](#)

[19/02/2025]

Bismut Hermitian Einstein and strong HKT manifolds

[Complex geometry at Aarhus University](#), Aarhus

[slides](#)

[10/12/2024]

Some Remarks on the BHE condition

[Seminar Informal de Noutăți Geometrice](#), University Alexandru Ioan Cuza of Iasi, România (online)

[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](#)

[slides](#) (in Italian)

[07/11/2024]

Some Remarks on the BHE condition

[Joint research seminar UNIBA-POLIBA on Geometry and Algebra](#), Bari

[27/10/2024 – 01/11/2024]

Generalized Kahler manifolds via mapping tori

[The international conference on differential geometry \(ICDG\)](#), Fez, Marocco

[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)

[slides](#)

[22/09/2024 – 27/09/2024]

Generalized Kahler manifolds via mapping tori

[Workshop on generalized complex structures and homological methods](#): Hamburg

[slides](#)

[08/04/2024 – 10/04/2024]

CYT and SKT manifolds with Parallel Bismut Torsion

[Differential Geometry Workshop in Lerici](#), Lerici

[Slides](#)

[16/02/2024 – 18/02/2024]

CYT and SKT manifolds with Parallel Bismut Torsion

[Symmetry and Geometry in South Florida](#), Florida International University, MIAMI

[18/01/2024]

CYT and SKT manifolds with Parallel Bismut Torsion

[Seminari di Geometria, Dipartimento di scienze Matematiche, Fische e Informatiche](#), Università di Parma

[03/07/2023 – 07/07/2023]

An introduction to Closed G2 structures

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

POSTER SESSIONS

[22/05/2023 – 26/05/2023]

Generalized Kähler manifolds via mapping tori

The 7th Workshop "Complex Geometry and Lie Groups", Università del Salento, Lecce, Italy

VISITING PERIODS

[01/02/2024 – 01/03/2024]

Florida Intenational University, MIAMI

Invited by Professor Anna Fino

GRANTS

[2025 – 2026]

"INdAM - GNSAGA Project", codice CUP E53C24001950001 (2000€)

Generalized Kahler structures on solvmanifolds

With M. Miceli, L. Sillari and T. Sferruzza

ORGANIZED EVENTS

[18/11/2024]

PhD Day

Palazzo Campana, University of Torino (Italy)

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

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

CONFERENCE ATTENDED

[31/03/2025 – 02/04/2025]

Informal Geometry Workshop in Paradiso 2025

Cogne (Aosta), Italy

Link: <https://sites.google.com/view/igwp2025/home-page?authuser=0>

[19/02/2025 – 21/02/2025]

Complex Geometry at Aarhus University

Aarhus, Denmark

Link: <https://conferences.au.dk/cogeomau>

[27/10/2024 – 01/11/2024]

The international conference on differential geometry (ICDG)

Fez, Marocco

Link: <https://www.fsdm.usmba.ac.ma/ICDGFZ2024/>

[22/09/2024 – 27/09/2024]

Workshop on generalized complex structures and Homological methods (with Grant)

University of Hamburg, Germany

Link: <https://www.conferences.uni-hamburg.de/event/464/>

[19/09/2024 – 20/09/2024]

2 Days on Geometric Structures and Function Theories

Università degli studi di Bari, Italy

Link: <https://sites.google.com/view/prin2022/2-days-on-geometric-structures-and-function-theories#:~:text=The conference 2 Days on,the form you find below.>

[28/07/2024 – 03/08/2024]

CIME School "Calabi-Yau varieties" (with Grant)

Cetraro, Italy

Link: <https://sites.google.com/unifi.it/cime/c-i-m-e-courses/c-i-m-e-courses-2024/calabi-yau-varieties?authuser=0>

[22/06/2024 – 05/07/2024]

BRIDGES Meeting on Special Geometries and Stability 2024 (with Grant)

Cargese, Corsica

Link: <https://bridges.geotop.ime.unicamp.br>

[08/04/2024 – 10/04/2024]

Differential Geometry Workshop in Lerici

Lerici, Italy

Link: <https://sites.google.com/view/dgwlerici?usp=sharing>

[16/02/2024 – 18/02/2024]

Symmetry and Geometry in the South Florida

Miami, Florida

Link: <https://sites.google.com/view/sgsf-2024/home-page?authuser=0>

[11/09/2023 – 15/09/2023]

Geoxflow: Geometric Flows on Complex Manifolds

Cortona, Italy

Link: <https://geoxflow.sciencesconf.org>

[03/07/2023 – 07/07/2023]

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

Inverness, Scotland

Link: <https://danielplatt.github.io/bigw/>

[21/06/2023 – 23/06/2023]

Real and Complex Manifolds: Topology, Geometry and Holomorphic Dynamics

Mathematics Department "Tor Vergata", Università degli Studi di Roma

Link: <https://sites.google.com/unifi.it/prin2017-manifolds/home>

[22/05/2023 – 26/05/2023]

The 7th Workshop "Complex Geometry and Lie Groups"

Università del Salento, Lecce, Italy

Link: <https://sites.google.com/site/annafino/7th-workshop-complex-geometry-and-lie-groups>

[17/05/2023 – 19/05/2023]

A Complex Differential Geometry Meeting at UniTo

Mathematics Department "G. Peano", Università degli Studi di Torino

Link: <https://sites.google.com/view/cdgmunito>