Valeria Bertini

Curriculum Vitae

Personal data

Name	**Valeria Bertini**.
Address	**DIMA (University of Genova)**, *office 909*, Via Dodecaneso, 35, 16146 Genova, Italy.
Email	.
Webpage	.

Academic positions

Mar 2023 -	**Postdoctoral fellow**, *Genova University*, Sponsored by PRIN Project 2020 "Curves, Ricci flat varieties and their interactions".
June 2022	**Postdoctoral fellow**, *Porto University (CMUP)*, Sponsored by FCT research grant EXPL/MAT-PUR/1162/2021 and by CMUP research grant UIDB/00144/2020, 9 months.
Oct 2019	**Postdoctoral fellows**, *TU-Chemnitz*, Sponsored by DFG research grant Le 3093/2-2, 24 months.

Research stays

Nov 2023	**Visiting Researcher**, *Bonn University*, 2 weeks.

Education

Dec 2019	**Ph.D. in Mathematics**, *Université de Strasbourg and Università degli Studi di Roma Tor Vergata, joint project*, Très honorable, Thesis advisors: Prof. Gianluca Pacienza and Prof. Antonio Rapagnetta. Thesis title: Rational curves on irreducible holomorphic symplectic varieties of OG10 type.
Jan 2015	**Master degree in Mathematics**, *La Sapienza University of Rome*, 110/110 cum laude. Thesis title: Vanishing and Embedding theorems.
Dec 2012	**Bachelor degree in Mathematics**, *La Sapienza University of Rome*, 110/110 cum laude. Thesis argument: minimal surfaces.

Research interests

Geometrical problems on (smooth and singular) irreducible symplectic varieties, as the study of their automorphisms group, and the existence of rational curves on them, with related consequences on Chow groups.

Construction of singular examples of singular irresucible symplectic varieites, as partial resolutions of symplectic quotients, or moduli spaces on singular surfaces.

Hodge structure of know (smooth and singular) irreducible symplectic varieties, with consequences on their singularities.

Publications and Preprints

June 2022	**Rational curves on primitive symplectic varieties of OG6 singular type**, *j.w. A. Grossi*, Math. Z. 304, 36 (2023).
Mar 2022	**Hodge structure of singular O'Grady's moduli spaces**, *j.w. F. Giovenzana*, In press in Annali della SNS di Pisa, preprint arXiv: arXiv:2203.07917.
Jan 2021	**Rational curves on O'Grady's tenfolds**, In press in Kyoto Journal of Mathematics, preprint arXiv: arXiv:2101.01029.

Teaching

SS 2020/21	**Höhere Mathematik II**, *Exercise class*, TU Chemnitz.
WS 2020/21	**Differential geometry**, *Exercise class*, TU Chemnitz.
WS 2020/21	**Höhere Mathematik I**, *Exercise class*, TU Chemnitz.
SS 2019/20	**Singularity theory**, *Exercise class*, TU Chemnitz.
SS 2019/20	**Algebra**, *Exercise class*, TU Chemnitz.
WS 2019/20	**Complex Geometry**, *Lectures and Exercise class*, TU Chemnitz.

Grants and honours

2018	**GAeL XXVI grants secured**, *Compositio Mathematica (4000 EUR), European Mathematical Society (6000 EUR), Gk1821 Grant University of Freiburg (10000 EUR), Institute Henri Poincaré (7000 EUR), CNRS (4000 EUR)*.
Excellence degree 2015	Acknowledgment for the best 400 graduated students at La Sapienza in the academic year 2013-2014, over ca. 19.000 students.

Invited conference talks

Jun 2023	**Terminalization of quotients of hyperkähler manifolds via symplectic actions**, *Genova*, GNT conference.
Feb 2023	**Terminalization of quotients of hyperkähler manifolds via symplectic actions**, *Stuttgart*, Workshop: Young Perspectives on Irreducible Holomorphic Symplectic Manifolds.
Dec 2022	**Terminalization of quotients of hyperkähler manifolds via symplectic actions**, *Milano University*, Seminario di Natale 2022.
Nov 2022	**Singular symplectic varieties as symplectic quotients of hyperkähler manifolds**, *Webinar*, VBAC.
Sep 2022	**Introduction on singular symplectic varieties**, *La Sapienza in Rome*, support talk at the conference: Hyperkaehler varieties and related topics.
Apr 2022	**The Hodge structure of singular O'Grady's moduli spaces**, *CIRM Luminy*, Research school: Symplectic singularities in geometry and representation theory.
Sept 2020	**Rational curves OG10-manifolds**, *Chemnitz University*, DMV Annual meeting 2020.
Nov 2017	**Rational curves on hyperkähler manifolds**, *Bologna University*, Workshop on IHS manifolds and stability conditions.

Invited seminar talks

June 2023	**An introduction on hyperkähler geometry**, *Genova University*.
Nov 2022	**The Hodge structure of O'Grady's singular moduli spaces**, *Bologna University*.
Sept 2022	**Compact Hyperkaehler varieties: from smooth to singular**, *Porto University*.
Mar 2020	**Rational curves on irreducible holomorphic symplectic varieties of OG10-type**, *Augsburg University*.

Jan 2020	**Rational curves on irreducible holomorphic symplectic varieties of OG10-type**, *Hannover University*.
Nov 2019	**Singularities in birational geometry**, *Working group on extension theorems of holomorphic forms*, MPI MiS of Leipzig.
Nov 2019	**Rational curves on irreducible holomorphic symplectic varieties of OG10-type**, *Poitiers University*.
Sept 2019	**Symplectic varieties**, *MPI MiS of Leipzig*.
July 2019	**Rational curves on irreducible holomorphic symplectic varieties of OG10-type**, *Università degli Studi di Trento*.
May 2018	**Uniruled divisors on the Hilbert scheme of points on a K3 surface**, *Imperial College of London*, Junior geometry seminar.

Conferences organised

Jan 2024	**Fano and Hyperkähler varieties in Genova**, *Genova*.
June 2019	**Workshop GAeL XXVII**, *Bucharest*.
June 2018	**Workshop GAeL XXVI**, *Strasbourg*.

Language skills

Italian	**Native speaker**.
English	**Fluent**.
German	**Working knowledge**.
French	**Working knowledge**.