

Alessio Borzi

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Homepage <https://alessioborzi.github.io/>

Current position



Since September 30, 2019 PhD student at the University of Warwick
Mathematics Institute
Advisor: [Diane MacLagan](#)

Education



July 29, 2019 **Master's degree in Mathematics**
University of Catania, Summa cum laude
Advisor: [Marco D'Anna](#)

July 20, 2017 **Bachelor's degree in Mathematics**
University of Catania, Summa cum laude
Advisor: [Marco D'Anna](#)



December 18, 2020 **Diploma of Scuola Superiore di Catania**
Scuola Superiore di Catania, Summa cum laude
Advisor: [Ivan Martino](#)
Opponent: [Alicia Dickenstein](#)

Languages

Mother tongue **Italian**

Foreign languages **English** (IELTS 7.5)

Talks

- November 18, 2021 Birational geometry of blow-ups of P^2 , Oberseminar Geometrie, University of Tübingen, Germany
- November 1, 2021 [Tropical moduli spaces and toric embeddings](#), $M_{0,n}$ seminar, (virtually at) University of Warwick, UK
- April 22, 2021 [Graded algebras with cyclotomic Hilbert series](#), Graduate student meeting on Applied Algebra and Combinatorics, (virtually at) University of Copenhagen, Denmark
- February 4, 2021 Tropical methods in toric intersection theory, Oberseminar Geometrie, (virtually at) University of Tübingen, Germany
- November 20, 2019 [Cyclotomic Numerical Semigroups](#), Postgraduate Seminar, University of Warwick, UK
- July 17, 2019 [Face poset and Grothendieck-Tutte polynomial of matroids over a domain](#), Algebra meets combinatorics in Neuchatel, Neuchatel, Switzerland
- March 25, 2019 Arf property on quadratic quotients of the Rees algebra, Problem solving seminar, Stockholm University, Sweden

September 3 - 7, 2018 [A characterization of the Arf property for quadratic quotients of the Rees algebra](#), International Meeting on Numerical Semigroups (IMNS), Cortona, Italy

Attended conferences

October 24-30, 2021 [Tropical Curves, Logarithmic Structures, and Enumerative Geometry](#), Oberwolfach, Germany

July 26 – August 6, 2021 [Combinatorial Algebraic Geometry](#), Online conference

June 28 – July 2, 2021 [Tropical Moduli Spaces](#), Online conference

April 21-23, 2021 [Graduate student meeting on Applied Algebra and Combinatorics](#), Online conference

March 19, 2021 [Birational Geometry and Thereabouts](#), Online conference

February 15 – March 5, 2021 [Research Encounters in Algebraic and Combinatorial Topics](#) (REACT), Online conference

June 8 – July 24, 2020 [Algebraic and Tropical Online Meetings](#) (ATOM), Online conference

June 1-5, 2020 [Warwick Macaulay 2 Workshop](#), University of Warwick, UK Online conference

December 6, 2019 [Tropical Differential Algebra Workshop](#), Queen Mary University of London, UK

December 2-4, 2019 [Einstein Workshop on Polytopes and Algebraic Geometry](#), Freie Universitat Berlin, Germany

July 15-17, 2019 [Algebra meets combinatorics in Neuchatel](#), Neuchatel, Switzerland

September 3 - 7, 2018 [International Meeting on Numerical Semigroups](#) (IMNS), Cortona, Italy

May 31 - June 4, 2017 [Encounter in Topology and Algebra](#) (ET'nA), Catania, Italy

Publications and Preprints

June 12, 2018 “A characterization of the Arf property for quadratic quotients of the Rees algebra”, [Journal of Algebra and Its Applications](#), [arXiv:1806.04448](#)

January 29, 2019 “Patterns on the numerical duplication by their admissibility degree”, [Numerical Semigroups - Springer INdAM Series](#), [arXiv:1901.10571](#)

September 1, 2019 “Set of independencies and Tutte polynomial of matroids over a domain”, with [Ivan Martino](#), [arXiv:1909.00332](#)

May 19, 2020 “Graded algebras with cyclotomic Hilbert series”, with [Alessio D’Alì](#), [Journal of Pure and Applied Algebra](#), [arXiv:2005.09708](#)

January 21, 2021 “Cyclotomic numerical semigroup polynomials with few irreducible factors,”, with [Andrés Herrera-Poyatos](#) and [Pieter Moree](#), [Semigroup Forum](#), [arXiv:2101.08823](#)

April 14, 2021 “Weierstrass sets on finite graphs”,
[arXiv:2104.07121](#)

June 24, 2021 “The leading coefficient of Lascoux polynomials”, with [Xiangying Chen](#),
[Harshit J. Motwani](#), [Lorenzo Venturello](#) and [Martin Vodička](#),
[arXiv:2106.13104](#)

Teaching

Fall 2021 Teaching assistant for the course [Analysis I](#),
University of Warwick

Winter 2021 Teaching assistant for the course [Rings and Modules](#),
University of Warwick

Fall 2020 Teaching assistant for the course [Algebraic Curves](#),
University of Warwick

Visits

October 29 - Research period at the University of Tübingen in the [combinatorial](#)
November 28, 2021 [algebraic geometry group](#), under the supervision of [Hannah Markwig](#)

March 7- June 5, 2019 Research period at the [KTH \(Stockholm-Sweden\)](#) under the supervision of
[Ivan Martino](#), supported by the [Scuola Superiore di Catania](#).

Outreach

October 2-3, 2021 Speaker at the [Simposio Matematico RIMSE 2021](#)

Second Edition: Lecturer (second edition) and Organizer (third and fourth edition) of a
April 22-24, 2016 [Training Course for Mathematical Olympiad](#) at the [Scuola Superiore di](#)
Third Edition: [Catania](#).

April 20-23, 2017

Fourth Edition:
April 19-22, 2018