

Alessio Borzi

Email ✉ Alessio.Borzi@warwick.ac.uk

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 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