Alessio Borzi

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Homepage https://alessioborzi.github.io/

Current position



Since PhD student at the University of Warwick

September 30, 2019 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

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 gudratic 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

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 <u>Tropical Differential Algebra Workshop</u>, Queen Mary University of London, UK
- December 2-4, 2019 <u>Einstein Workshop on Polytopes and Algebraic Geometry</u>, 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

Scientific production

- 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, arXiv:2005.09708
- January 21, 2021 "Cyclotomic numerical semigroup polynomials with few irreducible factors,", with Andrés Herrera-Poyatos and Pieter Moree, arXiv:2101.08823

Teaching

- Winter 2021 Teaching assistant for the course <u>Rings and Modules</u>, University of Warwick
 - Fall 2020 Teaching assistant for the course <u>Algebraic Curves</u>, University of Warwick

Visits

March 7- June 5, 2019 Research period at the <u>KTH (Stockholm-Sweden)</u> under the supervision of Ivan Martino, supported by the Scuola Superiore di Catania.

Outreach

Second Edition: Lecturer (second edition) and organizer (third and fourth edition) of the

April 22-24, 2016 Stage of Mathematical Olympiad at the Scuola Superiore di Catania *Third Edition:*

April 20-23, 2017

Fourth Edition:

April 19-22, 2018