

Alessandro De Stefani

Associate Professor

EDUCATION AND TRAINING

5/2016

PhD in Mathematics

Advisor: Craig Huneke University of Virginia, USA

12/2012

Master of Arts in Mathematics

University of Kansas, USA

PROFESSIONAL HISTORY

1/2021 - 12/2023

Ricercatore a tempo determinato - lettera b)

Università degli Studi di Genova

3/2019 - 12/2020

Ricercatore a tempo determinato - lettera a)

Università degli Studi di Genova

8/2017 - 2/2019

Postdoctoral Faculty Fellow

University of Nebraska, Lincoln, USA

8/2016 - 7/2017

Postdoctoral Fellow

Royal Institute of Technology (KTH), Sweden

ACADEMIC APPOINTMENTS

Since 2025

Vice-coordinator for Corso di Studi

CdL in Matematica LT, SMID and Matematica LM Università degli Studi di Genova

Since 2020

Member of the PhD Board

Department of Mathematics Università degli Studi di Genova



Since 2023

Member of the Teaching Committee for Corso di Studi

CdL in Matematica LT, SMID and Matematica LM Università degli Studi di Genova

EXPERIENCE

MAIN PUBLICATIONS

1 Bounds on the number of generators of prime ideals (with Caviglia)

To appear in American Journal of Mathematics (2025)

- 2 Hilbert-Kunz multiplicity of powers of ideals in dimension two (with Masuti, Rossi & Verma) To appear in Bulletin of the London Math. Society (2025)
- 3 Blowup algebras of determinantal ideals in prime characteristic (with Montaño & Núñez-Betancourt)

Journal of the London Math. Society 110 n.2 (2024)

- 4 The Eisenbud-Green-Harris conjecture for fast-growing degree sequences (with Caviglia) Annali della SNS di Pisa, Classe di Scienze XXV, 1753-1762 (2024)
- 5 Stability and deformation of F-singularities (with Smirnov) Israel Journal of Math. 264, 1-35 (2024)
- 6 A uniform Chevalley theorem for direct summands of polynomial rings in mixed characteristic (with Grifo & Jeffries)

Mathematische Zeitschrift 301, 4141-4151 (2022)

7 Cohomologically full rings (with Dao & Ma)

Int. Math. Research Notices 17, 13508-13545 (2021)

- 8 A Zariski-Nagata theorem for smooth Z-algebras (with Grifo & Jeffries)
- J. Reine Angewandte Mathematik 761, 123-140 (2020)
- 9 Globalizing F-invariants (with Polstra & Yao)

Advances in Mathematics 350, 359-395 (2018)

10 On the existence of F-thresholds and related limits (with Núñez-Betancourt & Pérez)

Transactions of the AMS 370, 6629-6650 (2018)

MAIN INVITED TALKS (SINCE 2023)

6/2025 Modules & Rings: Recent Developments in Commutative Algebra

A conference in honor of Marilina Rossi

Università degli Studi di Genova

3/2025 Commutative algebra in mixed characteristic

A conference in honor of Bhargav Bhatt's Rowlee Lecture

University of Nebraska, Lincoln, USA



3/2024 Commutative Algebra Seminar SLMath (formerly MSRI) Berkeley, USA

5/2023 Workshop on Commutative Algebra and Algebraic Geometry in Prime Characteristics A conference in honor of Melvin Hochster and Craig Huneke ICTP, Trieste

3/2023 Resolutions in Local Algebra and Singularity Theory MFO Oberwolfach, Germany

1/2023 Written Geometry: Commutative Algebra CIRM Luminy, France

SCIENTIFIC RESPONSIBILITY FOR RESEARCH PROJECTS ACCEPTED FOR FUNDING ON THE BASIS OF COMPETITIVE CALLS INVOLVING PEER REVIEW

2/2025-2/2027 PRIN 2022 "Unirationality, Hilbert schemes, and singularities" Local coordinator for the Università di Genova (PI: Giovanni Staglianò)

TEACHING OR RESEARCH POSITIONS (FELLOWSHIPS) AT FOREIGN UNIVERSITIES AND RESEARCH INSTITUTES

6/2022 75+80 = 155 years of commutative algebra

Three one-hour lectures withing a school dedicated to W. Bruns and J. Herzog Universität Osnabrück, Germania

PRIZES AND ACCOLADES FOR SCIENTIFIC ACTIVITY, INCLUDING MEMBERSHIP OF ACADEMIES 3/2024 Research member

Member within the program "Commutative Algebra"

SLMath (formerly MSRI) Berkeley, USA