

Francesco Genovese

Curriculum Vitae

Universiteit Antwerpen, Campus Middelheim
Middelheimlaan 1, 2020 Antwerpen
Belgium

✉ Francesco.Genovese@uantwerpen.be



Personal data

Birth Pavia, 25 December 1987
Citizenship Italian

Positions

May 2019 - July 2021 Postdoc at University of Antwerpen, supervisor Prof. Wendy Lowen
May 2017 - April 2019 Postdoc at University of Hasselt, supervisor Prof. Michel Van den Bergh
September 2016 - April 2017 Postdoc at the Mathematical Institute of the University of Bonn.

Education

November 2012 - December 2015 **Ph.D. in Mathematics**, *University of Pavia*, Mark: Ottimo.
Thesis: *Quasi-functors as lifts of Fourier-Mukai functors: the uniqueness problem*, advisor Prof. Alberto Canonaco. Thesis defended on 1 December 2015.
October 2009 - April 2012 **Laurea Magistrale (M.Sc.) in Mathematics**, *University of Pavia*, Mark: 110/110 cum laude.
Thesis: *Dg-enhancements of triangulated categories and the uniqueness problem of dg-lifts*, advisor Prof. Alberto Canonaco. Thesis defended on 17 April 2012.
October 2006 - February 2010 **Laurea Triennale (B.Sc.) in Mathematics**, *University of Pavia*, Mark: 110/110 cum laude.
Thesis: *Il problema delle estensioni e la coomologia dei gruppi*, advisor Prof. Ludovico Pernazza. Thesis defended on 18 February 2010.
October 2006 - December 2009 Student at *Istituto Universitario di Studi Superiori*, Pavia.
October 2006 - July 2016 Member of *Collegio Fratelli Cairoli*, Pavia.

Research interests

Homological algebra, category theory and their applications to (non-commutative) algebraic geometry. In particular, triangulated categories and their enhancements: dg-categories, A_∞ -categories; t-structures; deformations of triangulated categories, derived categories of algebraic varieties, Fourier-Mukai functors.

Publications and preprints

- 2021 A derived Gabriel-Popescu theorem for t-structures via derived injectives, joint with Julia Ramos González, preprint arXiv:2105.02561 [math.CT]
- 2019 T-structures and twisted complexes on derived injectives, joint with Wendy Lowen and Michel Van den Bergh, preprint arXiv:1905.07429 [math.CT]. To appear in *Adv. Math.*
- 2017 Adjunctions of quasi-functors between dg-categories, *Applied Categorical Structures* **25** (2017), no. 4, 625–657
- 2016 The uniqueness problem of dg-lifts and Fourier-Mukai kernels, *J. Lond. Math. Soc. (2)* **94** (2016), no. 2, 617–638

Talks

- 20 December 2019 Invited talk *t-structures and twisted complexes on derived injectives*, Department of Mathematics, University of Pavia
- 5 December 2018 Invited talk *t-structures and twisted complexes on derived injectives*, Algebraic Geometry Seminar, University of Liverpool
- 16 June 2017 Invited talk *Adjunctions of quasi-functors between dg-categories*, Algebra Seminar, University of Antwerp
- 25 May 2016 Invited talk *Il problema dell'unicità dei nuclei di Fourier-Mukai e dei dg-lift*, Giornate di Geometria Algebrica ed Argomenti Correlati XIII, Catania.
- 17 March 2016 Invited talk *The uniqueness problem of Fourier-Mukai kernels and dg-lifts*, Algebraic Geometry Seminar, University of Warsaw.
- 22 December 2015 Invited talk *Quasi-functors as lifts of Fourier-Mukai functors: the uniqueness problem*, Seminari di Natale, University of Milan.
- 15 June 2015 Contributed talk *Dg-lifts and uniqueness of Fourier-Mukai kernels*, 2014–2015 Warwick EPSRC Symposium: Fourier-Mukai, 34 years on.

Teaching experience

- 2020-2021 Exercise sessions for the course *Lineaire Algebra* given by Prof. Dr. Alain Verschoren, Bachelor in Computer Science, University of Antwerp.
- 2019-2020 Exercise sessions for the course *Lineaire Algebra* given by Prof. Dr. Alain Verschoren, Bachelor in Computer Science, University of Antwerp.
- 2014-2015 Teaching seminars for the course *Algebra 2* given by Prof. Paola Frediani, University of Pavia.
- 2013-2014 Teaching seminars for the course *Algebra 2* given by Prof. Maurizio Cornalba, University of Pavia.
- 2012-2013 Teaching seminars for the course *Istituzioni di geometria* given by Prof. Paola Frediani, University of Pavia.
- 2008-2009 Tutoring for the course *Matematica*, Corso di Laurea in Scienze Naturali, University of Pavia.

Outreach

I participate in the Italian science communication project *Meet Science* on the streaming platform Twitch, where we interview Italian scientists and academics, with the goal of spreading and communicating their activities to the general public.

Languages

Italian	Mothertongue	
English	Advanced	<i>First Certificate in English, Grade A, 2006</i>
French	Intermediate	<i>DELF 2nd degré, 2005</i>
Dutch	Upper intermediate	
German	Beginner	

Antwerpen, May 7, 2021