

TIMOTHY DE DEYN

tdedeyn.maths@gmail.com
<https://tdedeyn.github.io>

PERSONAL DATA

Nationality Belgian, British
Languages English (native, mother tongue), Dutch (native, father tongue), French (conversational)

EMPLOYMENT

Jan 2024 - UNIVERSITY OF GLASGOW
Dec 2025 **Research Associate**
Mentor: Prof. dr. Michael Wemyss

EDUCATION

Nov 2019 - VRIJE UNIVERSITEIT BRUSSEL
Oct 2023 **Ph.D. in Mathematics**
Title: Categorical resolutions of filtered schemes
Supervisor: Prof. dr. Michel Van den Bergh
Grant: Research Foundation - Flanders (FWO)

Sep 2017 - VRIJE UNIVERSITEIT BRUSSEL
Jul 2019 **Master of Science in Mathematics**
Summa cum laude

Sep 2016 - VRIJE UNIVERSITEIT BRUSSEL
Jul 2017 **Bachelor of Science in Mathematics**
Summa cum laude

Sep 2012 - VRIJE UNIVERSITEIT BRUSSEL
Jul 2015 **Bachelor of Science in Physics and Astronomy**
Summa cum laude

PUBLICATIONS & PREPRINTS

- [1] *A note on affine cones over Grassmannians and their stringy E-functions*, Proc. Amer. Math. Soc. 151 (2023), no. 6, 2363–2373.
- [2] *Categorical resolutions of filtered schemes*, J. Noncommut. Geom. (2024), published online first.
- [3] *Approximability and Rouquier dimension for noncommutative algebras over schemes*, joint with P. Lank and K. Manali-Rahul, arXiv:2408.04561.
- [4] *Descent and generation for noncommutative coherent algebras over schemes*, joint with P. Lank and K. Manali-Rahul, arXiv:2410.01785.
- [5] *Descending strong generation in algebraic geometry*, joint with P. Lank and K. Manali-Rahul, arXiv:2502.08629.
- [6] *Regularity and bounded t-structures for algebraic stacks*, joint with P. Lank, K. Manali-Rahul and F. Peng, arXiv:2504.02813.
- [7] *Quasi-perfect blowups detect regularity*, joint with P. Lank and K. Manali-Rahul, arXiv:2508.10845.
- [8] *Re-framing the classification of ideals in noncommutative tensor-triangular geometry*, joint with S. K. Miller, arXiv:2510.23767.
- [9] *Measuring birational derived splinters*, joint with P. Lank, K. Manali-Rahul and S. Venkatesh, arXiv:2510.26648.

- [10] *Nonexistence of singly compactly generated t -structures for schemes*, joint with A. Bhaduri, M. Hrbek, P. Lank and K. Manali-Rahul, arXiv:2511.01622.

AWARDS AND GRANTS

- 2019-2023 Ph.D. Fellowship fundamental research
Personal four-year Ph.D. research grant of the national research foundation FWO.
- 13 Dec 2019 ‘Prijs van de wetenschappen’
Prize awarded to the best graduating student of the faculty of Sciences and Bioengineering Sciences.

TEACHING

Teaching Assistant for the following courses

- Spring 2020-2023 Introduction to Group Theory
‘Inleiding tot de groepentheorie’, 1st year mathematics students
- Spring 2020 &
Fall 2020-2022 Ordinary Differential Equations
‘Gewone differentiaalvergelijkingen’, 2nd year mathematics students
- Fall 2020-2022 Differential Geometry
‘Differentiaalmeetkunde’, 2nd year mathematics students
- Fall 2020-2022 Mathematics: Complements
‘Aanvullingen Wiskunde’, 2nd year Chemistry and Geography students
- Fall 2019 Engineering Skills: Mathematical techniques
‘Ingenieursvaardigheden: Wiskundige Technieken’, 1st year engineering students

Miscellaneous

- 2017 - 2019 Tutor at Solutio
Tutoring secondary school students in mathematics, physics, chemistry and biology.
- 2017 - 2018 Tutor at Vrije Universiteit Brussel
Tutoring the class of first year mathematics and physics students at the Vrije Universiteit Brussel, helping them with their mathematics courses, and introducing them to other aspects of studying at university.

TALKS

Conference, Colloquium and Workshop talks

- 15 Apr 2025 GLEN workshop, Sheffield, United Kingdom
- 20 Dec 2023 Young Scholar Day 2023, Brussels, Belgium
- 25 Nov 2022 The Antwerp Algebra Colloquium, Antwerp, Belgium
- 13 Jul 2022 The Fourth W. Killing and K. Weierstrass Colloquium, Gdańsk, Poland

Seminar talks

- 8 May 2025 Seminari di geometria algebrica complessa, Università degli Studi di Milano
- 27 Feb 2025 Algebraic Geometry Seminar, University of Liverpool
- 22 Mar 2024 Belgian-Dutch Junior Algebraic Geometry Seminar, Universiteit Antwerpen
- 20 Feb 2024 Algebraic Geometry Seminar, University of Glasgow
- Spring 2020 In the Pursuing stacks seminar, online

PROFESSIONAL ACTIVITIES

Research visits/stays

- Dec 2019 Max Planck Institute for Mathematics, Germany, hosted by Michel Van den Bergh (two weeks)
- May 2025 Università degli Studi di Milano, Italy, hosted by Pat Lank (one week)

Events and seminars co-organised

- Jan 2025 - Present Derived categories and noncommutative enthusiasts (D.A.N.C.E.) seminar
Online seminar organised with Anirban Bhaduri, Pat Lank and Kabeer Manali-Rahul.
- 8-9 May 2024 Algebraic Geometry Days in Glasgow
Two days of talks organised with Inder Kaur, Emma Lepri, Matthew Pressland and Franco Rota.
- Spring 2020 Pursuing stacks
Co-organised a reading group following Jarod Alper's course on stacks.

Committees

- 2020 - 2023 Member of the Student Disciplinary Committee, VUB
- 2020 - 2023 Representative of the teaching assistants in the Mathematics Education council, VUB
- 2017 - 2019 Student representative in the Mathematics Education council, VUB
- 2014 - 2015 Student representative in the Physics and Astronomy Education council, VUB

Other

- Peer review for J. Pure Appl. Algebra
- Reviewer for Mathematical Reviews
- Reviewer for zbMATH

CONFERENCES, WORKSHOPS AND SCHOOLS ATTENDED

- 1 - 5 Sep 2025 Motives, equivariant topology, and tt-geometry, Warwick, United Kingdom
- 28 - 29 Aug 2025 The Legacy of Peter Gabriel, Bielefeld, Germany
- 7 - 11 Jul 2025 Workshop on derived categories, noncommutative geometry and deformation theory, Cetraro, Italy
- 14 - 15 Apr 2025 GLEN workshop, Sheffield, United Kingdom
- 7 - 11 Apr 2025 Recent Developments in Algebraic K-Theory, Warwick, United Kingdom
- 9 - 10 Dec 2024 GLEN workshop, Glasgow, United Kingdom
- 28 - 30 Oct 2024 Tale of Geometries, Brussels, Belgium
- 23 - 27 Sep 2024 MFO-RIMS Tandem Workshop: Algebraic Geometry and Noncommutative Projective Varieties, Oberwolfach, Germany
- 16 - 20 Sep 2024 School on Deformation Theory IV, Rome, Italy
- 8 - 12 Apr 2024 Recent Developments in Noncommutative Algebraic Geometry, Berkeley, United States of America
- 26 - 30 Sep 2022 Representation Theory and Triangulated Categories, Paderborn, Germany
- 12 - 16 Sep 2022 Noncommutative Shapes, Antwerp, Belgium
- 5 - 6 Sep 2022 Algebra Days in Paris, Paris, France
- 31 Aug - 2 Sep 2022 Higher structures in deformation theory, Freiburg, Germany
- 30 Jul - 5 Aug 2022 Derived Categories, Moduli Spaces, and Hyperkähler Varieties, Ann Arbor, United States of America
- 18 - 22 Jul 2022 The Fourth W. Killing and K. Weierstrass Colloquium, Gdańsk, Poland
- 16 - 20 May 2022 Invariants in Algebraic Geometry, Dijon, France
- 14 - 16 Dec 2021 Arithmetic and geometry of varieties with trivial canonical bundle, Oslo, Norway
- 13 - 17 Sep 2021 Summer School on Derived and Triangulated Categories, Wuppertal, Germany
- 9 - 13 Sep 2019 The Geometry of Derived Categories, Liverpool, United Kingdom