

# OLIVIER HAUTION

## INFORMAZIONI PERSONALI

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Indirizzo Corso Emanuele Filiberto 55, 23900 Lecco, Italia  
Stato civile coniugato, 2 figlie (nate 2017, 2019)  
Lingue francese, inglese, tedesco, italiano

## ESPERIENZE PROFESSIONALI

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2023–oggi Professore associato (MAT/03), Università di Milano-Bicocca  
2018–2023 [Heisenberg position](#), LMU München  
2022 Professore ad interim (W3), TU München  
2020–2021 Professore ad interim (W2), LMU München  
2012–2018 Assistente (akademischer Rat auf Zeit), LMU München  
2010–2012 Ricercatore, University of Nottingham  
2009–2010 Ricercatore (ATER à temps complet), Université Paris 6  
2006–2009 Dottorando con incarico didattico (Allocataire-Moniteur), Université Paris 6

## TITOLI DI STUDIO

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2016 Abilitazione in Matematica, LMU München (Gennaio 2016)  
Tesi: *Integrality Properties of Algebraic Cycles*  
2006–2010 Dottorato di ricerca in Matematica, Université Paris 6 (Febbraio 2010)  
Tesi: *Steenrod Operations and Quadratic Forms*  
Relatore: [Nikita Karpenko](#)  
2005–2006 Master in Matematica, École Polytechnique  
2002–2005 [Ingénieur Polytechnicien Program](#), École Polytechnique  
2000–2002 Classes Préparatoires, Lycée la Martinière Montplaisir, Lyon

## PROGETTI DI RICERCA, ABILITAZIONI E PREMI

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2021 Abilitazione Scientifica Nazionale (01/A2), prima e seconda fascia.  
2020–2023 DFG individual research grant *Intersection Theory and Cobordism with a Quadratic Twist*, unico ricercatore principale (286.200 €)  
2018–2023 DFG [Heisenberg programme](#), unico ricercatore principale (620.600 €)  
2016–2019 DFG individual research grant *New Perspectives for Canonical Dimension*, unico ricercatore principale (14.400 €)  
2006–2009 Borsa di dottorato AMX dal Ministero della Ricerca di Francia  
2005 Prix d'option scientifique assegnato dall'École Polytechnique per un tirocinio al Tata Institute of Fundamental Research in Mumbai

Teorie motiviche, forme quadratiche, azioni di gruppi su schemi

PREPRINT

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- O. Haulion, Dimension of fixed loci of diagonalizable groups via algebraic cobordism, [arXiv:2602.17451](#)
- O. Haulion, Actions of diagonalizable  $p$ -groups and Chern numbers modulo  $p$ , [arXiv:2412.02483](#)

PUBBLICAZIONI

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19. O. Haulion, [The geometric concentration theorem](#), *Advances in Mathematics*, 489 (2025), paper no. 110237
18. J. Fasel and O. Haulion, [The stable Adams operations on Hermitian  \$K\$ -theory](#), *Geometry and Topology*, 29 (2025), no. 1, 127–169
17. O. Haulion, [Odd rank vector bundles in eta-periodic motivic homotopy theory](#), *Journal of the Institute of Mathematics of Jussieu*, 24 (2025), no. 5, 1733–1764
16. O. Haulion, [Motivic Pontryagin classes and hyperbolic orientations](#), *Journal of Topology*, 16 (2023), no. 4, 1423–1474
15. O. Haulion, [On the algebraic cobordism ring of involutions](#), *Annales Scientifiques de l'École Normale Supérieure* (4) 56 (2023), no. 4, 981–1028
14. O. Haulion and A. S. Merkurjev, [Connective  \$K\$ -theory and Adams operations](#), *EMS Surveys in Mathematical Sciences*, 8 (2021), no. 1-2, 135–162
13. O. Haulion, [Involutions and Chern numbers of varieties](#), *Commentarii Mathematici Helvetici*, 95 (2020), no. 4, 811–843
12. O. Haulion, [Diagonalisable  \$p\$ -groups cannot fix exactly one point on projective varieties](#), *Journal of Algebraic Geometry*, 29 (2020), 373–402
11. O. Haulion, [Fixed point theorems involving numerical invariants](#), *Compositio Mathematica*, 155 (2019), no. 2, 260–288
10. O. Haulion, [Involutions of varieties and Rost's degree formula](#), *Journal für die reine und angewandte Mathematik (Crelle)*, 745 (2018), 231–252
9. O. Haulion, [On rational fixed points of finite group actions on the affine space](#), *Transactions of the American Mathematical Society*, 369 (2017), 8277–8290
8. O. Haulion, [Detection by regular schemes in degree two](#), *Algebraic Geometry*, 2 (2015), no. 1, 44–61
7. O. Haulion, [Invariants of upper motives](#), *Documenta Mathematica*, 18 (2013), 1555–1572
6. O. Haulion, [Duality and the topological filtration](#), *Mathematische Annalen*, 357 (2013), no. 4, 1425–1454

5. O. Haulion, Degree formula for the Euler characteristic, *Proceedings of the American Mathematical Society*, 141 (2013), no. 6, 1863-1869
4. O. Haulion, On the first Steenrod square for Chow groups, *American Journal of Mathematics*, 135 (2013), no. 1, 53-63
3. O. Haulion, Integrality of the Chern character in small codimension, *Advances in Mathematics*, 231 (2012), no. 2, 855-878
2. O. Haulion, Reduced Steenrod operations and resolution of singularities, *Journal of K-theory*, 9 (2012), no. 2, 269-290
1. O. Haulion, Lifting of coefficients for Chow motives of quadrics, in Quadratic Forms, Linear Algebraic Groups, and Cohomology, volume 18 of *Developments in Mathematics*, 239-247, Springer, New York (2010)

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PARTECIPAZIONE COME RELATORE A CONVEGNI

18. Conference *Motifs and Motives*, Munich, 2026 (upcoming)
17. Conference *Motives in Mainz*, Mainz, 2024
16. Workshop *Motives and Invariants: Theory and Applications to Algebraic Groups and their Torsors*, Banff International Research Station, 2023
15. Mini course (4 hours), Summer school *Motives in Ratisbona*, Regensburg, 2022
14. *Workshop on Birational Geometry*, Higher School of Economics Moscow, 2020
13. Workshop *Affine Algebraic Groups, Motives and Cohomological Invariants*, Banff International Research Station, 2018
12. *Workshop on Motivic and Equivariant Homotopy Theory*, Osnabrück, 2017
11. *International Conference in K-Theory*, Sydney, 2016
10. Workshop *Algebraic Cobordism and Projective Homogeneous Varieties*, Mathematisches Forschungsinstitut Oberwolfach, 2016
9. Workshop *The Use of Linear Algebraic Groups in Geometry and Number Theory*, Banff International Research Station, 2015
8. Conference *(A)round Forms, Cycles and Motives*, Mainz, 2014
7. Workshop *Projective Modules and A1-Homotopy Theory*, American Institute of Mathematics, Palo Alto, 2014
6. Workshop *Étale and Motivic Homotopy Theory*, Heidelberg, 2014
5. *Spring School and Workshop on Torsors, Motives and Cohomological Invariants*, Field Institute, Toronto, 2013
4. Workshop *Lie Algebras, Torsors and Cohomological Invariants*, Banff International Research Station, 2012
3. Joint Mathematics Meetings AMS Special Session *Linear Algebraic Groups: Their Arithmetic, Geometry, and Representations*, Boston, 2012

2. Conference *Ramification in Algebra and Geometry at Emory*, Atlanta, 2011
1. Mini-course *Torsors and Geometry of Quadrics*, Lens, 2009

#### SEMINARI SU INVITO E COLLOQUIA (SELEZIONE)

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- Department colloquium (2026, upcoming) and Algebra seminar (2015), University of Alberta, Edmonton
- Motivic algebraic topology seminar, LMU München, 2008, 2012, 2024, 2025
- Arithmetic Geometry seminar, University of Milan, 2024
- Algebraic geometry seminar at TIFR, Mumbai, 2020
- Séminaire Variétés Rationnelles, École Normale Supérieure, Paris, 2017, 2019
- Algebra and geometry seminar, University of Grenoble, 2015, 2019
- Seminar, Institut Mittag-Leffler Stockholm, 2017
- Department colloquium, University of Western Ontario, 2016
- Algebra seminar, University of Ghent, 2016

#### VISITING FELLOWSHIPS E SOGGIORNI DI RICERCA

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- 2025, CAS visiting fellowship, Monaco, Germania (3 settimane)
- 2017, Istituto Mittag-Leffler, Stockholm, Svezia (2 settimane)
- 2006, Università di Bielefeld, Germania (3 mesi)
- 2005, TIFR Mumbai, India (3 mesi)

#### SUPERVISIONE

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- Supervisore di un assegno di ricerca (Fabio Tanania), 2020–2023
- Relatore di una tesi di laurea triennale, *Nonsolvability of degree five equations*, 2016
- Relatore di una tesi di laurea magistrale, *La congettura di Bloch-Kato* (in corso)

#### SERVIZIO

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##### Organizzazione di convegni

- *Geometria in Bicocca*, 2024, 2025, 2026
- *Quadratic forms and algebraic cycles*, Paris, 2025
- Quinta edizione del ciclo *Crossings*, Milan, 2025.

## Valutazione, revisione e commissioni

- Membro della commissione giudicatrice per un assegno di ricerca presso l'Università di Milano-Bicocca, 2026
- Revisore e membro della commissione di dottorato a Parigi 13: *Isotropy of Quadratic Pairs* di A. W. Medhi, 2026
- Valutatore di progetti di ricerca per il DAAD: *Servizio Tedesco per lo Scambio Accademico*, 2016
- Revisore (referee) per diverse riviste matematiche internazionali, tra cui Journal of the EMS, Annales Scientifiques de l'ENS, Compositio Mathematica, Journal für die reine und angewandte Mathematik (Crelle), Advances in Mathematics, e Algebra & Number Theory.

## ATTIVITÀ DIDATTICA

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### Lezioni (come titolare del corso)

- Matematica per l'insegnamento – algebra (LM biologia), 2024–2026
- Algebra lineare e geometria (LT informatica), 2023–2026
- Geometria complessa, 2023–2024
- Algebraic number theory (lezioni e esercitazioni), 2021–2022
- Exam preparation course in algebra for future teachers, 2021–2022
- Brauer groups of fields (lezioni e esercitazioni), 2020–2021
- Galois cohomology (lezioni e esercitazioni), 2019–2020
- Intersection theory (lezioni e esercitazioni), 2014–2015, 2017–2018
- Homological methods in commutative algebra (lezioni e esercitazioni), 2016–2017
- Local algebra (lezioni e esercitazioni), 2013–2014

### Seminari per studenti (come titolare del corso)

- Reading course on étale cohomology, 2020–2021
- Number theory for future teachers, 2019–2020
- Topological data analysis, 2019–2020
- Quadratic forms and arithmetic, 2018–2019
- Brauer groups and Galois cohomology, 2015–2016
- Quadratic forms, 2014–2015
- Introduction to motivic cohomology and motives, 2013–2014
- Arithmetic, 2012–2013

## Esercitazioni

- Vari corsi di laurea triennale e magistrale, tra cui Algebra lineare, Algebra, Aritmetica, Geometria e Geometria algebrica, 2006–2026.

## CARICO DIDATTICO

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<b>Periodo</b>	<b>Università</b>	<b>Ruolo</b>	<b>Servizio</b>	<b>Durata</b>
2023–oggi	Milano-Bicocca	Professore associato	120 ore annuali	in corso
2022–2023	LMU	Heisenberg position	—	1 anno
2022	TUM	Professore	9 ore settimanali	6 mesi
2021–2022	LMU	Heisenberg position	—	1 anno
2020–2021	LMU	Professore	9 ore settimanali	1 anno
2018–2020	LMU	Heisenberg position	—	1,5 anni
2012–2018	LMU	Assistente	5 ore settimanali	6 anni
2010–2012	Nottingham	Ricercatore	—	2 anni
2009–2010	Paris 6	Ricercatore	160 ore annuali	1 anno
2006–2009	Paris 6	Dottorando	64 ore annuali	3 anni
2005–2006	Polytechnique	Tutore	60 ore annuali	1 anno

*Data: 26 marzo 2026*