

# Curriculum Vitae

Menet Quentin  
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Born in Tournai on March 19th, 1988  
Nationality : Belgian

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## Professional situation

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**Current position** (01/09/24 - present) : Professor (Université de Mons, Belgium).

### Past positions

- 2019–2024** : F.R.S-FNRS Research Associate (Université de Mons, Belgium).
- 2015–2019** : Associate Professor (Université d'Artois, France).
- 2014–2015** : F.R.S-FNRS Postdoctoral researcher (Université de Mons, Belgium).

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## Education

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- 2018–2019** : Habilitation à diriger des recherches, Université d'Artois, France  
Title : Dynamique linéaire dans les espaces de Fréchet  
Defense : October 26, 2018
- 2010–2014** : PhD Student, Université de Mons, Belgium  
Title : Existence and non-existence of hypercyclic subspaces  
Supervisor : K.-G. Grosse-Erdmann  
Thesis defense : November 15, 2013  
Position : FRIA grant (01/10/10 - 30/09/14)
- 2008–2010** : Master in Mathematical Sciences, Université de Mons, Belgium
- 2005–2008** : Bachelor in Mathematical Sciences, Université de Mons, Belgium

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## Scientific responsibilities

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### Current responsibilities :

1. Member of the National Committee for Mathematics in Belgium (2022-present)
2. Member of the Belgian Mathematical Society Board (2024-present)
3. Secretary of the FNRS Group "Analyse fonctionnelle" (2022-present)
4. Member of the association "Math.en.Jeans Belgique" (2021-present)
5. Organizer of Functional Analysis Days with the support of the FNRS Group (2023-present)
6. Reviewer for MathSciNet.
7. Referee for several international journals : Proceedings of the AMS, Journal of Mathematical Analysis and Applications, Journal of Operator Theory, Archiv der Mathematik, Israel Journal of Mathematics, New-York Journal of Mathematics, Information and Computation, Results in Mathematics, ...

### Past responsibilities :

1. Organizer of the Analysis Day in Mons with the support of EDT Math (2019-2024)
2. Organizer of the PhD Student Day in Mathematics of the "Fédération de Recherche en Mathématiques du Nord/Pas-de-Calais" (2018-2019)
3. Member of the FNRS Contact Committee and the CORSCI Council of UMONS (2021-2024)
4. Member of the project ANR FRONT - Frontier of Operator Theory (2018-2022)
5. Member of the Mathematical Laboratory Council (LML) (2016-2019)

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## Doctoral and scientific supervision

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### Supervision of postdoctoral research

1. Vieira Costa Junior Fernando (01/10/23 – 30/09/26), *Linear dynamics : common hypercyclicity, study of shifts on trees and new properties*
2. Papathanasiou Dimitris (15/04/22 – 31/08/23), *Accumulation points and generalized shifts*

### Supervision of PhD theses

1. Alessandro Quattrocchi (01/01/26 – 31/12/29), *Dynamics of shift operators and related operators*
2. Fougnes Noémie (15/09/23 – 14/09/29), *Almost-invariant half-spaces and cyclicity for shifts*
3. Mestiri Monia (01/10/14 – 30/09/18), *Common U-frequent hypercyclicity*, co-directed by Grosse-Erdmann Karl.

### Member of a thesis jury

1. Valentin Gillet (14/11/25), *A study of some remarkable properties of some classes of linear operators on Banach spaces : typicality of positive contractions and random products of operators*, Université de Lille, France
2. Galant Damien (09/12/24), *The nonlinear Schrödinger equation on metric graphs*, Université Polytechnique Hauts-de-France, France/ Université de Mons, Belgium
3. Agneessens Kevin (29/09/23), *Frequently Hypercyclic Random Vectors*, Université de Mons, Belgium
4. Santacreu Ferrà Daniel (14/07/22), *Composition operators on classes of holomorphic functions on Banach spaces*, Universitat Politècnica de València, Spain
5. Goulard Aline (07/07/22), *Les mesures de risque de Haezendonck-Wang*, Université de Mons, Belgium
6. Saes Guillaume (27/01/22), *Fractal sums of pulses : Dimensional and multifractal study of paths and simulations*, Université de Mons, Belgium
7. Lambotte Quentin (12/07/21), *Tame pairs of integers*, Université de Mons, Belgium
8. Heuwelyckx Fabien (28/04/16), *Lookback options with floating strike and binomial approximations*, Université de Mons, Belgium

## Supervision of master's theses

1. Vanhaverbeke Maximilien (2025-2026), *On the Bishop-Phelps-Bollobás property*.
2. Quattrocchi Alessandro (2024-2025), *La Dynamique linéaire de familles d'opérateurs commutants*.
3. Fougnes Noémie (2022-2023), *Le problème du sous-espace invariant*.
4. Sauro Alessio (2021-2022), *Dynamique des opérateurs de Lipschitz*.
5. Carlier Pierre (2013-2014), *Composition of Stochastic Timed Automata*, co-directed by Brihaye Thomas.
6. Mestiri Monia (2013-2014), *Existence de vecteurs hypercycliques communs*.
7. Londero Alessandro (2012-2013), *Image de l'indice numérique sur les  $\mathbb{R}$  et  $\mathbb{C}$ -espaces vectoriels*, co-directed by Brive Bruno.
8. Zumbo Amélie (2012-2013), *Résolutions de problèmes géométriques et analytiques*, co-directed by Finet Catherine.

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## Visits

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1. Visiting researcher, April 2023, Université du Littoral Côte d'Opale, Calais, France
2. Visiting researcher, June 2016, Universitat Politècnica, València, Spain
3. Visiting researcher, February 2015, Texas A&M University, College Station, Texas, USA
4. Visiting researcher, April 2014, Université Blaise Pascal, Clermont-Ferrand, France
5. Visiting researcher, April 2013, Bowling Green State University-Kent State University, Ohio, USA
6. Visiting researcher, April 2012, Universitat Politècnica, València, Spain
7. Erasmus Student, September 2009 - January 2010, Université Pierre et Marie Curie, Paris, France

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## Scientific awards and honours

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1. Triennial Agathon De Potter Prize in Mathematical Sciences (Académie Royale de Belgique) (2018-2020)
2. Antonella Karlson Prize (F.R.S.-FNRS) (2015)
3. Selected for participating in the 1st and the 3rd Heidelberg Laureate Forum in 2013 and in 2015
4. Maurice Boffa Prize (Université de Mons) (2010)

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## Publications

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### Articles published in peer-review

#### 2026 :

1. Grivaux Sophie, Matheron Etienne, Menet Quentin. "Generic properties of  $l_p$  - Contractions and similar operator topologies", Israel Journal of Mathematics, to appear.  
<https://doi.org/10.1007/s11856-026-2901-z>.

#### 2025 :

2. Grivaux Sophie, Matheron Etienne, Menet Quentin. "Orthogonality of invariant measures for weighted shifts", Pure and Applied Functional Analysis, to appear.
3. López-Martínez Antoni, Menet Quentin. "Two remarks on the set of recurrent vectors", Journal of Mathematical Analysis and Applications 541, 17p.
4. Menet Quentin, Papathanasiou Dimitris, "Dynamics of weighted shifts on  $\ell^p$ -sums and  $c_0$ -sums", Advances in Mathematics, 470, 37p.
5. Bayart Frédéric, Grivaux Sophie, Matheron Etienne, Menet Quentin, "Hereditarily frequently hypercyclic operators and disjoint frequent", Ergodic Theory and Dynamical Systems, <https://doi.org/10.1017/etds.2025.13>, 52p.

#### 2024 :

6. Menet Quentin, Papathanasiou Dimitris. "Structure of sets of bounded sequences with a prescribed number of accumulation points", Proceedings of the American Mathematical Society, 152, 1517-1529.

#### 2022 :

7. Bayart Frédéric, Costa Jr. Fernando, Menet Quentin, *Common hypercyclic vectors and dimension of the parameter set*, Indiana University Mathematics Journal, 71, 1763-1795.
8. Menet Quentin, *Inverse of frequently hypercyclic operators*, Journal of the Institute of Mathematics of Jussieu, 21, 1867-1886.
9. Martin Özgür, Menet Quentin, Puig Yunied, *Disjoint frequently hypercyclic pseudo-shifts*, Journal of Functional Analysis, 283, 44p.

#### 2021 :

10. Grivaux Sophie, Matheron Etienne, Menet Quentin, *Does a typical  $l_p$ -space contraction have a non-trivial invariant subspace?*, Transactions of the American Mathematical Society 374, 7359-7410.
11. Menet Quentin, *Invariant subspaces for Fréchet spaces without continuous norm*, Proceedings of the American Mathematical Society 149, 3379-3393.
12. Charpentier Stéphane, Grosse-Erdmann Karl, Menet Quentin, *Chaos and frequent hypercyclicity for weighted shifts*, Ergodic Theory and Dynamical Systems 41, 3634-3670.
13. Ernst Romuald, Esser Céline, Menet Quentin *U-frequent hypercyclicity notions and related weighted densities*, Israel Journal of Mathematics 241, 817-848.
14. Grivaux Sophie, Matheron Etienne, Menet Quentin, *Linear dynamical systems on Hilbert spaces : Typical properties and explicit examples*, Memoirs of the American Mathematical Society 269, 147p.

**2020 :**

15. Menet Quentin, *Inverse of  $U$ -frequently hypercyclic operators*, Journal of Functional Analysis 279, 4, 20p.
16. Menet Quentin, *A bridge between  $U$ -frequent hypercyclicity and frequent hypercyclicity*, J. Math. Anal. Appl. 482, 15p.

**2019 :**

17. Menet Quentin, *Existence of common hypercyclic subspaces for the derivative operator and the translation operators*, Rev. R. Acad. Cienc. Exactas Fís. Nat. Ser. A Mat. RACSAM 113, no. 2, 487–505.
18. Bès Juan, Menet Quentin, Peris Alfred, Puig Yunied, *Strong transitivity properties for operators*, J. Differential Equations 266, no. 2-3, 1313–1337.

**2018 :**

19. Menet Quentin, *Invariant subspaces for non-normable Fréchet spaces*. Advances in Mathematics 339, 495–539.

**2017 :**

20. Menet Quentin, *Linear chaos and frequent hypercyclicity*, Transactions of the American Mathematical Society 369, 4977–4994.

**2016 :**

21. Bès Juan, Menet Quentin, Peris Alfredo, Puig de Dios Yunied, *Recurrence properties of hypercyclic operators*, Mathematische Annalen 366, Issue 1, 545–572.
22. Bayart Frédéric, Ernst Romuald, Menet Quentin, *Non-existence of frequently hypercyclic subspaces for  $P(D)$* , Israel Journal of Mathematics 214, Issue 1, 149–166.
23. Charpentier Stéphane, Ernst Romuald, Menet Quentin,  *$\Gamma$ -supercyclicity*, Journal of Functional Analysis 270, 4443–4465

**2015 :**

24. Bès Juan, Menet Quentin, *Existence of common and upper frequently hypercyclic subspaces*, Journal of Mathematical Analysis and Applications 432, 10–37.
25. Brihaye Thomas, Haddad Axel, Menet Quentin, *Simple strategies for Banach-Mazur games and sets of probability 1*, Information and Computation 245, 17–35.
26. Menet Quentin, *Hereditarily hypercyclic subspaces*, Journal of Operator Theory 73, 2, 385–405.
27. Menet Quentin, *Existence and non-existence of frequently hypercyclic subspaces for weighted shifts*, Proceedings of the American Mathematical Society 143, 2469–2477.

**2014 :**

28. Menet Quentin, *Hypercyclic subspaces and weighted shifts*, Advances in Mathematics 255, 305–337.
29. Charpentier Stéphane, Menet Quentin, Mouze Augustin, *Closed universal subspaces of spaces of infinitely differentiable functions*, Annales de l'Institut Fourier 64, 1, 297–325.
30. Bertrand Nathalie, Bouyer Patricia, Brihaye Thomas, Menet Quentin, Baier Christel, Groesser Marcus et Jurdzinski Marcin, *Stochastic timed automata*, Logical Methods in Computer Science 10, 4 :6, 1–73.

**2013 :**

31. Menet Quentin, *Hypercyclic subspaces on Fréchet spaces without continuous norm*, Integral Equations and Operator Theory 77, 4, 489–520.

**2011 :**

32. Menet Quentin, *Sous-espaces fermés de séries universelles sur un espace de Fréchet*, Studia Mathematica 207, 2, 181-195.

## Articles published in conference proceedings

**2016 :**

33. Bouyer Patricia, Brihaye Thomas, Carlier Pierre, Menet Quentin, *Compositional Design of Stochastic Timed Automata*, CSR 2016, Computer Science : Theory and Applications Volume 9691 of the series Lecture Notes in Computer Science, 117–130.

**2013 :**

34. Brihaye Thomas, Menet Quentin, *Simple strategies for Banach-Mazur games and fairly correct systems*, GANDALF, EPTCS 119, 21-34.

**2012 :**

35. Bouyer Patricia, Brihaye Thomas, Jurdzinski Marcin, Menet Quentin, *Almost-Sure Model-Checking of Reactive Timed Automata*, QEST, IEEE Computer Society Press, 138-147.

## Popular mathematics

1. Grosse-Erdmann Karl, Menet Quentin, *Le chaos linéaire : un paradoxe ?*, Interstices, 2012.
2. Brihaye Thomas, Menet Quentin, *Topology, probability, games and verification*, Notes de la cinquième BSSM, 2013.

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## Research Presentations

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**2026 :**

1. *Hypercyclicity : From Weighted Shifts to Lipschitz-Free Operators*, Recent Trends In Operator Theory And Function Theory, Lille, France
2. *Hypercyclicity for Lipschitz operators*, FAME 2026, Poznan, Poland

**2025 :**

1. *Dynamics of shift operators*, ACOTCA, Clermont-Ferrand, France
2. *Weighted shifts in linear dynamics*, Analysis and Geometry seminar, Anvers, Belgium

**2024 :**

1. *Fractal dimension and common hypercyclicity*, SUMTOPO 2024, Coimbra, Portugal
2. *Operators of C-type*, Mini-Workshop : New Horizons in Linear Dynamics, Universality, and the Invariant Subspace Problem, Oberwolfach, Germany

**2023 :**

1. *Dynamical properties of operators on Fréchet spaces*, Maurice Fréchet : Les mathématiques, l'abstrait et le concret, Paris, France
2. *Common hypercyclicity and covering*, Seminar Analysis Brussels Ghent Liège Trier, Liège, Belgium
3. *The frequency of Chaos, Universality, Zeta-Functions, and Chaotic Operators*, CIRM, France
4. *Linéabilité - Nombres prescrits de points d'accumulation*, Seminar "Algèbre, Dynamique et Arithmétique", Calais, France

**2022 :**

1. *Common hypercyclicity and covering*, International workshop on Functional Analysis on the occasion of the 60th birthday of Carmen Fernandez and Antonio Galbis, Valencia, Spain
2. *Typical properties of operators on  $l^p$ -spaces*, Progress in Functional Analysis : Methods and Applications, Lecce, Italy
3. *1991 : A small step for Godefroy and Shapiro, one giant leap for linear dynamics*, Functional Analysis in Lille, Lille, France
4. *Les jeux de Banach-Mazur et la théorie des opérateurs*, Ecole de printemps du GDR AFHP, Calais, France
5. *L'hypercyclicité commune et l'art du recouvrement*, Séminaire d'Analyse et Géométrie, Marseille, France

**2021 :**

1. *How to shift from frequent hypercyclicity to chaos ?*, Frontiers of Operator Theory, CIRM, France
2. *A-hypercyclicity*, Four Days in Linear Dynamics, Naples, Italy
3. *Linear Dynamics*, 1st EUNICE Math Symposium, online

**2020 :**

1. *Jeux de Banach-Mazur, espace de contractions et injectivité*, Journées annuelles du GDR AFHP, CIRM, France
2. *Sous-espaces invariants et noyaux de seminormes*, Séminaire d'Analyse Fonctionnelle, Lille, France
3. *Les systèmes dynamiques ou l'art d'itérer*, Séminaire du CREM, Belgium

**2019 :**

1. *Le chaos linéaire : un paradoxe ?*, Colloquium du LMPA, Calais, France
2. *Dynamic behaviors of the inverse of an operator*, Workshop d'automne de l'ANR Front, Clermont-Ferrand, France
3. *Les Eclaireurs : Moyen-Orient, Effet Papillon et Economie Vertueuse*, with Leroy Didier, Muylaert Coralie, Vande Meerseche Fabienne, Radio show, Bruxelles, Belgium

**2018 :**

1. *Invariant subspaces in Fréchet spaces*, Pawel Domanski Memorial Conference, Bedlewo, Poland

2. *Invertible operators and dynamical properties*, Workshop on Functional Analysis and Operator Theory, Valencia, Spain

**2017 :**

1. *Invariant subspaces in Fréchet spaces*, Journées du GDR AFHP, Bordeaux, France
2. *Invariant subspaces in Fréchet spaces*, Seminario del IUMPA, Valencia, Spain
3. *Typical properties of hypercyclic operators on Hilbert Spaces*, CEDYA, Cartagena, Spain
4. *Sous-espaces invariants pour les espaces de Fréchet*, Séminaire d'Analyse et Géométrie, Marseille, France

**2016 :**

1. *Periodic points at the service of hypercyclicity*, Conference of the Belgian, Royal Spanish and Luxembourg Mathematical Societies, Logrono, Spain
2. *A rich family of weighted operators*, Seminario del IUMPA, Valencia, Spain
3. *Periodic points at the service of hypercyclicity*, Journée du GdR AFHP, Toulouse, France

**2015 :**

1. *Chaos linéaire et hypercyclicité fréquente*, Séminaire d'Analyse et Géométrie, Marseille, France
2. *Hypercyclic subspaces*, Banach Spaces Seminar, College Station, Texas, USA
3. *Linear chaos and frequent hypercyclicity*, Linear Analysis Seminar, College Station, Texas, USA
4. *Linear chaos and frequent hypercyclicity*, Analysis Seminar, Houston, Texas, USA
5. *Propriétés de récurrence des opérateurs hypercycliques*, Séminaire d'Analyse Fonctionnelle, Lille, France
6. *Different notions of hypercyclicity and hypercyclic subspaces*, Recent Trends in Operator Theory and Function Theory, Lille, France
7. *Linear chaos and frequent hypercyclicity*, Workshop Functional Analysis Valencia 2015, Valencia, Spain
8. *Linear dynamical systems*, 3ème Heidelberg Laureate Forum, Heidelberg, Germany
9. *Linear chaos and frequent hypercyclicity*, Operator Algebra Seminar, Leuven, Belgium
10. *Linear chaos and frequent hypercyclicity*, Frontiers of Operator Dynamics, CIRM-Luminy, Belgium

**2014 :**

1. *Chaos linéaire et hypercyclicité fréquente*, Séminaire d'Initiation à l'Analyse, Paris, France
2. *Linear Chaos and Frequent Hypercyclicity*, Istanbul Analysis Seminars, Istanbul, Turkey.
3. *Chaos linéaire et hypercyclicité fréquente*, Journées du GdR AFHP, Lille, France
4. *Existence of common hypercyclic subspaces*, IWOTA, Amsterdam, Netherlands
5. *Existence of frequently hypercyclic subspaces*, FNRS Group-Functional Analysis, Esneux, Belgium
6. *Shifts à poids sur  $\ell^p$  et sous-espaces fréquemment hypercycliques*, Journées Cortenaises d'Analyse Mathématique, Corte, France

7. *Existence de sous-espaces fréquemment hypercycliques*, Séminaire d'Initiation à l'Analyse, Paris, France

**2013 :**

1. *Shifts à poids sur  $l^p$  et sous-espaces fréquemment hypercycliques*, Séminaire d'Analyse et Géométrie, Marseille, France
2. *Hypercyclic subspaces*, Nord-Pas-de-Calais/Belgium congress of mathematics, Mons, Belgium
3. *Banach-Mazur games*, Nord-Pas-de-Calais/Belgium congress of mathematics, Valenciennes, France
4. *Simple strategies for Banach-Mazur games and fairly correct systems*, GANDALF, Borca di Cadore, Italy
5. *Hypercyclic subspaces on Fréchet spaces without continuous norm*, Conference "Operators on Banach spaces", Castro Urdiales, Spain
6. *Hypercyclic subspaces on Fréchet spaces without continuous norm*, Measure Theory Seminar, Kent, USA
7. *Hypercyclic subspaces on Fréchet spaces*, Measure Theory Seminar, Kent, USA
8. *Dynamical systems and hypercyclic operators*, Colloquium, Kent, USA
9. *Hypercyclic subspaces on Fréchet spaces without continuous norm*, Analysis Seminar, Bowling Green, USA
10. *Hypercyclic subspaces on Fréchet spaces*, Analysis Seminar, Bowling Green, USA
11. *Hypercyclicité pour un sous-ensemble*, Mini-cours, Lens, France

**2012 :**

1. *Sous-espaces hypercycliques dans les espaces de Fréchet*, Journées du Gdr AFHP, Marne-La-Vallée, France
2. *Sous-espaces hypercycliques dans les espaces de Fréchet*, Séminaire d'Analyse Fonctionnelle, Lille, France
3. *Hypercyclic subspaces and weighted shifts*, Seminario del IUMPA, Universitat Politècnica de València, Spain

**2011 :**

1. *Sous-espaces fermés de séries universelles*, Journées 2011 du Gdr AFHA, Clermont-Ferrand, France
2. *Sous-espaces hypercycliques et shifts à poids*, Séminaire d'Initiation à l'Analyse, Paris, France