

# 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** (01/10/19 - present) : F.R.S-FNRS Research Associate (Université de Mons, Belgium).

### Past positions

**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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1. Member of the National Committee for Mathematics in Belgium (2022-present)
2. Secretary of the FNRS Group "Analyse fonctionnelle" (2022-present)
3. Member of the FNRS Contact Committee and the CORSCI Council of UMONS(2021-present)
4. Member of the association "Math.en.Jeans Belgique" (2021-present)
5. Organizer of the Analysis Day in Mons with the support of EDT Math (2019-present)
6. Organize of Functional Analysis Days with the support of the FNRS Group (2023-present)
7. Organizer of the PhD Student Day in Mathematics of the "Fédération de Recherche en Mathématiques du Nord/Pas-de-Calais" (2018-2019)
8. Member of the project ANR FRONT - Frontier of Operator Theory (2018-2022)

9. Member of the Mathematical Laboratory Council (LML) (2016-2019)
10. Reviewer for MathSciNet.
11. 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, ...

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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. Papatthanasiou Dimitris (15/04/22 – 31/08/23), *Accumulation points and generalized shifts*

### Supervision of PhD theses

1. Fougnyes Noémie (15/09/23 – 14/09/29), *Almost-invariant half-spaces and cyclicity for shifts*
2. Mestiri Monia (01/10/14 – 30/09/18), *Common  $U$ -frequent hypercyclicity*, co-directed by Grosse-Erdmann Karl.

### Member of a thesis jury

1. Agneessens Kevin (29/09/23), *Frequently Hypercyclic Random Vectors*, Université de Mons, Belgium
2. Santacreu Ferrà Daniel (14/07/22), *Composition operators on classes of holomorphic functions on Banach spaces*, Universitat Politècnica de València, Spain
3. Goulard Aline (07/07/22), *Les mesures de risque de Haezendonck-Wang*, Université de Mons, Belgium
4. Saes Guillaume (27/01/22), *Fractal sums of pulses : Dimensional and multifractal study of paths and simulations*, Université de Mons, Belgium
5. Lambotte Quentin (12/07/21), *Tame pairs of integers*, Université de Mons, Belgium
6. Heuwelyckx Fabien (28/04/16), *Lookback options with floating strike and binomial approximations*, Université de Mons, Belgium

### Supervision of master's theses

1. Fougnyes Noémie (2022-2023), *Le problème du sous-espace invariant*.
2. Sauro Alessio (2021–2022), *Dynamique des opérateurs de Lipschitz*.
3. Carlier Pierre (2013–2014), *Composition of Stochastic Timed Automata*, co-directed by Brihayé Thomas.
4. Mestiri Monia (2013–2014), *Existence de vecteurs hypercycliques communs*.
5. Londero Alessandro (2012–2013), *Image de l'indice numérique sur les  $\mathbb{R}$  et  $\mathbb{C}$ -espaces vectoriels*, co-directed by Brive Bruno.

6. 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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### Research Presentations

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#### 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 Meerssche 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  $\ell^p$  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

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## Publications

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See the tab **Research** on my homepage.