

# Curriculum Vitæ

## Personal information

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Date of birth: 2nd Jan 1982  
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## Education

2018 **Habilitation**, "*Functionals, Integrals, Spheres and Cusps*", Université Paul Sabatier (Toulouse, France).  
2005-2008 **PhD in Theoretical and Computational Chemistry**, Université de Lorraine (Nancy, France). Supervisor: Prof. Xavier Assfeld.  
2005 **Magistère Molecular Engineering**, Université de Lorraine (Nancy, France).  
2005 **MSc in Theoretical Chemistry**, Université de Lorraine (Nancy, France).  
2005 **MSc in Physical Chemistry**, Université de Lorraine (Nancy, France).  
2004 **BSc in Physical Chemistry**, Université de Lorraine (Nancy, France).

## Current positions

2021- **CNRS Senior Researcher (DR2)**, [Laboratoire de Chimie et Physique Quantiques \(LCPQ\)](#), UMR5626, Université Paul Sabatier (Toulouse, France).

## Previous positions

2017-2021 **CNRS Researcher**, Laboratoire de Chimie et Physique Quantiques (LCPQ), UMR5626, Université Paul Sabatier (Toulouse, France).  
2016-2017 **Senior Lecturer**, group leader of the Mathematical and Theoretical Chemistry group, Research School of Chemistry, Australian National University (Canberra, Australia).  
2013-2015 **Australian Research Council Research Fellow**, Discovery Early Career Researcher Award from the Australian Research Council, group leader of the Mathematical and Theoretical Chemistry Group, Research School of Chemistry, Australian National University (Canberra, Australia).  
2008-2012 **Postdoctoral Fellow in Theoretical Quantum Chemistry**, Theoretical Quantum Chemistry Group, Research School of Chemistry, Australian National University (Canberra, Australia). Supervisor: Prof. Peter Gill.

## Fellowships & Grants

2020-2024	<b>ERC Consolidator grant H2020</b> (PI), “ <i>PT-symmetric electronic structure theory</i> ”, (€1,895,636), Project No. 863481.
2020-2022	<b>80 PRIME research grant: Mission pour les Initiatives Transverses et Interdisciplinaires (MITI)</b> (PI), “ <i>Multireference quasiparticles for strong correlation</i> ”, (€XX,000), XXX.
2020-2022	<b>Research grant from NEXT/NanoX</b> (co-PI with Pina Romaniello), “ <i>Multireference quasiparticles for strong correlation</i> ”, (€88,000), ANR-17-EURE-0009.
2019-2021	<b>Travel grant: Projet International de Coopération Scientifique (PICS)</b> , “ <i>Multideterminant quantum Monte Carlo methods for strongly correlated materials</i> ”, (€21,000), PICS08310.
2017	<b>Visiting Fellow</b> , Australian National University (Canberra, Australia).
Jun. 2016	<b>Visiting Erskine Fellow</b> , University of Canterbury (Christchurch, New Zealand).
Feb. 2016	<b>Visiting Fellow</b> , Université Paul Sabatier (Toulouse, France).
2014-2016	<b>Discovery Project grant from the Australian Research Council</b> (Co-PI with Peter Gill), “ <i>Accurate chemistry via resolution and quadrature</i> ” (\$330,000), DP140104071.
2013-2016	<b>Discovery Early Career Researcher Award from the Australian Research Council</b> (PI), “ <i>Thinking outside the box: spherical geometry in chemistry and physics</i> ” (\$365,219), DE130101441.
2008	<b>Prize of the best PhD thesis in Molecular Physics and Chemistry</b> , Université de Lorraine (Nancy, France).
2005-2008	<b>French government scholarship</b> (MRT scholarship) for PhD studies.

## Supervision role

Postdocs (6)	Dauids Agboola (2014), Marat Sibaev (2015-2016), Stefano di Sabatino (2019-2020), Fabris Kossoski (2020-), Raul Quintero-Monsebaiz (2021-), Sara Giarrusso (2023-)
PhDs (7)	Caleb Ball (2014-2017) and Giuseppe Barca (2014-2017) co-supervised with Peter Gill, Mickael VÉril (2018-2021), Enzo Monino (due 2023), Roberto Orlando (due 2023), Yann Damour (due 2024), Antoine Marie (due 2025).
MSc (9)	Anneke Knol (2015), Sam Backwell (2015), Fergus Rogers (2016), Sebastian Sitkiewicz (2017), Mickael VÉril (2018), Thomas Colle (2019), Antoine Marie (2020 & 2021), Pierre Racine (2020), Roberto Orlando (2020), Maia Courtiel (2021).
Visiting fellows	Denis Jacquemin (2016), Université de Nantes (hosted as the Craig lecturer at the Research School of Chemistry of the Australian National University), Xavier Assfeld (2016), Université de Lorraine, Joshua Hollett (2018), University of Winnipeg and Peter Gill, (2019) University of Sydney.

## Teaching activities

- 2021- **Lecturer**, École Normale de Lyon, Master of Advanced Computational Chemistry (correlation methods).
- 2021- **Lecturer**, International summer School in electronic structure Theory: electron correlation in Physics and Chemistry (Aussois, France).
- 2018- **Lecturer**, TCCM winter school LTTC in Theoretical Chemistry, (Luchon, France).
- 2014 & 2016 **Lecturer**, Quantum and Computational Chemistry Student Conference (Cass, New Zealand).
- 2017-2020 **Teaching assistant**, Engineering school ISAE-SUPAERO (Toulouse, France).
- 2016 **Senior Lecturer**, Research School of Chemistry (Australian National University): designed an entire third-year course in Computational Chemistry and Molecular Modelling (CHEM3208, course convenor) and Honours (fourth-year) course in Theoretical and Computational Chemistry.
- 2006-2008 **Teaching assistant** in Mathematics, Department of Pharmacy, Université de Lorraine (Nancy, France).
- 2005 **Teaching assistant** in Physical Chemistry, Department of Chemistry, Université de Lorraine (Nancy, France).
- 2004 **Teaching assistant** in Quantum/Computational Chemistry, Department of Chemistry, Université de Lorraine (Nancy, France).

## Community service et administrative activities

- 2018–2023 Foundation member of the “Groupement de Recherche” [NBODY](#) (previously [CORREL](#)).

## Organisation of scientific meetings

- 2023 5th edition of the [Mini-school on mathematics for theoretical chemistry and physics](#) (Paris, France).
- 2023 Workshop on [emerging excited-state methods in electronic structure](#) (Toulouse, France).
- 2022 4th edition of the [Mini-school on mathematics for theoretical chemistry and physics](#) (Paris, France).
- 2022 2nd general meeting of the [GDR NBODY](#) (Toulouse, France).
- 2021 [Quantum Chemistry/Nuclear Physics workshop](#) (on line).
- 2020- Member of the organisation committee of the [International summer School in electronic structure Theory: electron correlation in Physics and Chemistry](#) (Aussois, France).
- 2019 3rd edition of the [Mini-school on mathematics for theoretical chemistry and physics](#) (Paris, France).
- 2018 Annual meeting of the [IRSAMC](#) institute (Toulouse, France).
- 2016 [2nd Quantum and Computational Chemistry Student Conference](#) (Cass, New Zealand).

## Institutional responsibilities

- 2013-2017 Undergraduate Student Advisor, Australian National University (Canberra, Australia).
- 2018- Alternate leader of the theoretical method development group ([THEO](#)) at the LCPQ (Toulouse, France).
- 2019- Seminar coordinator of the LCPQ.

## Reviewing activities

- 2018-            Doctoral Thesis Examiner: Dr David Gregoire (Université de Marseille, France), Dr Killian Deur (Université de Strasbourg, France), Dr Mauricio Rodriguez Mayorga (Universitat de Girona, Spain), Dr Sara Giarrusso (Vrije Universiteit, Amsterdam, The Netherlands), Dr Alberto Fabrizio (EPFL Lausanne, Switzerland), Dr Bang Huynh (Cambridge, UK), Dr Mikael Frosini (CEA Saclay, France), Dr Laurent Lemmens (Ghent University, Belgium), Dr Oliver Backhouse (King's College London, UK).
- 2022-            Habilitation Examiner: Dr Matthieu Saubanère (University of Montpellier, France).
- 2013-            Reviewer, Australian Research Council (Australia), National Science Center (Poland), Natural Sciences and Engineering Research Council (Canada)
- 2016-2017      Interview panel member for postdoctoral positions at the Australian National University.
- 2008-            Reviewer (~ 20 papers/year) for various scientific journals (JCP, JCTC, JPC, PCCP, PRL, PRB, PRA, etc).

## Memberships of scientific societies

- 2017-            Member, World Association of Theoretical Oriented Chemists (WATOC).

## Major collaborations

- International    Hugh Burton (Oxford, UK), Peter Gill (University of Sydney, Australia), Paola Gori-Giorgi (Amsterdam, Netherlands), Eduardo Matito (Donostia, Spain).
- National         Anthony Scemama & Michel Caffarel (Université de Toulouse), Denis Jacquemin (Université de Nantes), Bruno Senjean (Université de Montpellier), Emmanuel Fromager (Université de Strasbourg), Julien Toulouse & Emmanuel Giner (Sorbonne Université), Pina Romaniello & Arjan Berger (Université de Toulouse), Martial Boggio-Pasqua (Université de Toulouse), Xavier Blase (Institut Néel, Grenoble)