
Personal information

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Positions

01/07/2020 - **Whittaker Research Fellow**, *The University of Edinburgh, School of Mathematics*, Edinburgh, UK.
01/11/2018 - 30/06/2020 **Research Associate**, *Imperial College, Department of Mathematics*, London, UK.
01/09/2017 - 31/10/2018 **R&D Researcher**, *Suez Eau France*, Bordeaux, France.
(1 year break from academia)
01/09/2014 - 31/08/2017 **PhD candidate**, *École Normale Supérieure, Department of Mathematics and Applications*, Paris, France.

Education

09/2014 - 06/2017 **PhD (Applied Mathematics)**, *École Normale Supérieure*, Paris, France.
09/2013 - 08/2014 **Master of Science (Applied Mathematics)**, *École Polytechnique*, Palaiseau, France. *Summa cum laude*.
01/2011 - 08/2013 **Bachelor of Science (Applied Mathematics)**, *École Polytechnique*, Palaiseau, France.
03/2007 - 11/2010 **First years of studies in basic sciences and engineering**, *Pontificia Universidad Católica, Faculty of Engineering*, Santiago, Chile.

PhD thesis

Title *Mathematical Analysis of Plasmonic Resonances and Applications*.
Advisor Habib Ammari.
Defence June 27th, 2017 at *École Normale Supérieure, Paris*.
Jury Gabriel Peyré (president, *ENS Paris*), Gilles Lebeau (reviewer, *Université Nice-Sophia-Antipolis*), Oscar Bruno (reviewer, *Caltech*); Bertrand Maury (examiner, *Université Paris-Sud*), Liliana Borcea (examiner, *University of Michigan*), Josselin Garnier (examiner, *École Polytechnique*).

Teaching experience

10/2020 - present **Tutoring**, *The University of Edinburgh*, Edinburgh, UK.
Subject: **Research Skills for Applied and Computational Mathematics** (MSc course).
10/2019 - 11/2019 **Lectures**, *Imperial College*, London, UK.
Subject: **Asymptotic Analysis** (MSc course).
01/2016 - 06/2016 **Lectures**, *Paris Science Lettres (PSL), CPES*, Paris, France.
Subject: **Linear Algebra**.

- 09/2014 - 01/2015 **Lectures**, *Paris Science Lettres (PSL), CPES*, Paris, France.
Subject: **Linear Algebra**.
- 08/2010 - 11/2010 **Teaching Assistant**, *Pontificia Universidad Católica, Department of Mathematics*, Santiago, Chile.
Subject: **Ordinary Differential Equations**.
- 03/2010 - 06/2010 **Teaching Assistant**, *Pontificia Universidad Católica, Department of Mathematics and Faculty of Engineering*, Santiago, Chile.
Subjects: **Calculus 2** and **Fourier Analysis**.
- 08/2009 - 11/2009 **Teaching Assistant**, *Pontificia Universidad Católica, Faculty of Engineering*, Santiago, Chile.
Subject: **Fourier Analysis**.

Service

- **Co-organiser** (along with Ory Schnitzer, Richard Craster, and John Pendry) of a *Plasmonics* workshop to be held at Imperial College London (date postponed).
- **Refereed** for: *SIAM Multiscale Modeling and Simulation*, *Studies in Applied Mathematics*, *Journal of Computational Physics*, *SIAM Journal on Applied Mathematics*, *SN Partial Differential Equations and Applications*.
- **Reviewer** for: *AMS Mathematical Reviews* and *zbMATH*.

Funding and awards

- 01/2020 **Whittaker research fellowship**, awarded by the School of Mathematics of the University of Edinburgh, Edinburgh, UK.
- 01/2017 **LMH post-doctoral fellowship (declined)**, awarded by the Fondation Mathématique Jacques Hadamard, Paris, France.
- 06/2014 **AMX scholarship for doctoral studies**, awarded by the Ministry of Higher Education and Research, Paris, France.
- 03/2011 **Eiffel excellence scholarship for undergraduate studies**, awarded by the Ministry of Europe and Foreign Affairs, Paris, France.
- 02/2011 **"A class" teaching assistant**, *Pontificia Universidad Católica, Department of Mathematics*, Santiago, Chile.
Recognition to teaching assistants having achieved excellence in teaching and academic performance.

Talks in conferences

- 23/07/2019 **Contributed talk**, *META 2019*, Lisbon, Portugal.
- 16/07/2019 **Contributed talk**, *International Congress on Industrial and Applied Mathematics (ICIAM) 2019*, Valencia, Spain.
- 08/07/2019 **Invited talk**, *Applied Inverse Problems (AIP) 2019*, Grenoble, France.
- 25/04/2019 **Contributed talk**, *British Applied Mathematics Colloquium (BAMC) 2019*, Bath, UK.
- 31/05/2017, 02/06/2017 **Two invited talks**, *Applied Inverse Problems (AIP) 2017*, Hangzhou, China.
- 16/05/2017 **Contributed talk**, *Waves 2017*, Minneapolis, USA.
- 18/01/2017 **Invited talk**, *10th International Conference on Computational Physics (ICCP10)*, Macao, China.

- 19/07/2016 **Contributed talk**, *14th International Conference on Integral Methods in Science and Engineering (IMSE 2016)*, Padova, Italy.
- 05/08/2015 **Invited talk**, *Inverse Problems in the Physical Sciences (Satellite conference of the International Congress on Mathematical Physics 2015)*, Santiago, Chile.

Talks in workshops and seminars

- 22/09/2020 **Joint Webinar on Analysis and Computation in Materials Science (Invited)**, online meeting.
- 12/02/2020 **TNTN2020 workshop (Contributed)**, *Zuse institute*, Berlin, Germany.
- 12/11/2019 **Nanophotonics and electromagnetism group seminar (Invited)**, *Laboratoire Charles Fabry, Institut d'Optique*, Palaiseau, France.
- 04/11/2019 **POEMS seminar (Invited)**, *POEMS group, ENSTA*, Palaiseau, France.
- 29/05/2019 **Post-doc seminar**, *Department of Mathematics, Imperial College*, London, UK.
- 10/05/2019 **The Mathematics of Metamaterials workshop (Invited)**, *Department of Mathematics, University of Liverpool*, Liverpool, UK.
- 13/01/2017 **Mathematics department seminar (Invited)**, *Department of Mathematics, Hong-Kong University of Science and Technology*, Hong-Kong, China. (as part of a research visit to Dr. Hai Zhang).