

Laurent Cantier

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Current Address: 9 carrer de les Carolines, es1, 08012 Barcelona, Spain

Born: 26/10/1991 in Cagnes-sur-Mer, France (29)

CAREER OBJECTIVE

I am a post-doctoral researcher at the Universitat Autònoma de Barcelona for the academic year 2020/2021. My investigation is related to algebraic aspects of Operator Algebras, with connections to Ring Theory, Cuntz Semigroups and K-Theory.

I am looking for a post-doctoral position in Operator Algebras related research group and/or a teaching position, starting by October 2021.

EDUCATION

Oct 2020 – Now

Post-Doctoral Position – Universitat Autònoma de Barcelona

Working with Prof. Antoine and Prof. Perera and Teaching.

Oct 2016 – Oct 2020

PhD in Mathematics – Universitat Autònoma de Barcelona

Obtained with highest honours (Cum Laude).

Advisors: Prof. Antoine and Prof. Perera.

Title: A new invariant for C^ -algebras.*

Main Topics: Operator Algebras – C^ -algebras – Cuntz semigroup – K-Theory.*

Oct 2015 – Jun 2016

Master de Mathématiques et Applications – Université of Paris 6

Sept 2011 – Oct 2015

Engineering Master (Applied Mathematics) – Ecole Centrale de Nantes

*General Engineering School Diploma – Major: **Applied Mathematics**. Centrale Nantes is among the 10 best French 'Grandes Ecoles'.*

2 years of common courses

1 year abroad (IT internship of 10 months – AMADEUS company - London)

1 year of specialized courses: Applied Mathematics.

Sept 2009 – Sept 2011

Classes Préparatoires MPSI/MP* – Lycée Masséna, Nice

A 2-year intensive course in Mathematics, Physics and Chemistry, towards the national competitive entry examinations for French 'Grandes Ecoles'.

2009

Baccalauréat S – Lycée Stanislas, Cannes

High school Diploma obtained with maximum qualification (Très Bien).

PROFESSIONAL EXPERIENCE

Oct 2020 – Now	Becario FPI-POP (BES-2016-077192) – CRM, Barcelona (Spain)
Oct 2017 – Oct 2020	Becario FPI (BES-2016-077192) – CRM, Barcelona (Spain)
Apr 2015 – Oct 2015	IT Developer (Intern) – Sopra-Steria, Aix-en-Provence (France)
May 2013 – Mar 2014	IT Developer (Intern) – Amadeus Ltd, Nice (France) and London (UK)

PUBLICATIONS

- [A unitary Cuntz semigroup for \$C^*\$ -algebras of stable rank one](#), L.Cantier (2021). J. Funct. Anal.
- [Unitary Cuntz semigroups of ideals and quotients](#), L.Cantier (2021). Münster J. of Math.

PREPRINTS

- [Uniformly PoM-Based \$Cu\$ -semigroups and Approximate Intertwinings](#), L.Cantier (2021).
- [The unitary Cuntz semigroup on the classification of non-simple \$C^*\$ -algebras](#), L.Cantier (2021).

TEACHING

- **Matemàtiques** – *Problemas de Estructures Algebraiques* (2nd year, 20/21, 15 hours)
- **Matemàtiques** – *Problemas de Àlgebra Commutativa* (4th year, 20/21, 14 hours)
- **Matemàtiques** – *Problemas de Estructures Algebraiques* (2nd year, 19/20, 15 hours)
- **Matemàtiques** – *Problemas de Àlgebra Commutativa* (4th year, 19/20, 14 hours)
- **CC. i Tec. Aliments** – *Pràctiques de Matemàtiques* (1st year, 18/19, 32 hours)
- **Biotecnologia** – *Problemas de Probabilitat I Estadística* (2nd year, 18/19, 16 hours)

CONFERENCES - COURSES

- **BMS-BGSMath Junior Meeting 2021**, Universitat de Barcelona, Sep 01 – Sep 03, 2021. [Organizing Committee](#).
- **Wokshop on Cuntz semigroups**, Westfälische Wilhelms-Universität (WWU) Münster, Jul 11 – Jul 16 2021. [Invited Speaker](#). (*The unitary Cuntz semigroup on the classification of non-simple C^* -algebras.*)
- **NCG&T Seminar**, Institute of Mathematics, Czech Academy of Sciences. May, 2021. [1 talk](#).
- **Seminar of the 'Teoria d'Anells' research group**, Universitat Autònoma de Barcelona, Sep 2016 – Now. [Several talks](#).
- **Workshop Barcelona Weekend on Operator Algebras II**, Centre de Recerca Matemàtica, Barcelona, Sep 19 – Sep 21, 2019.
- **Seminar of the ULL research group**, University of Louisiana at Lafayette, Mar 2019 – Jun 2019. [2 talks](#).
- **Workshop Operator Algebras, Groups and Applications to Quantum Information**, ICMAT, Madrid (UAM), Mar 10 – Mar 15, 2019.
- **Workshop Barcelona Weekend on Operator Algebras**, Centre de Recerca Matemàtica, Barcelona, Nov 17 – Nov 18, 2018.
- **Seminar on groupoid C^* -algebras**, UAB, Sep 2017 – Jan 2018. [3 talks](#).
- **CSASC 2018**, Bratislava, Sep 11 – Sep 14, 2017. [Invited speaker](#). (*Introducing the Cu_1 semigroup.*)
- **Operator Algebras and Dynamical Systems**, Centre de Recerca Matemàtica, Barcelona, Mar 1 - Jul 1, 2017. [Organizing Committee](#).
- **Advanced Course on Groupoids, Crossed Products and Rokhlin Dimension held by Aidan Sims, Gabor Szabo and Dana Williams**, Centre de Recerca Matemàtica, Barcelona, Mar 13 - Mar 17, 2017.
- **Graduate course held by T.Leinster and J.Kock on Category Theory**, Universitat Autònoma de Barcelona, Jan 10 – Jan 26, 2017.

RESEARCH STAYS

- **Visiting position:** University of Louisiana at Lafayette (USA) under the supervision of Prof. Robert, Mar 25 - Jun 15, 2019.

SKILLS

- **French:** Native speaker
- **English:** Fluent (1 year abroad, TOEIC 870)
- **Spanish:** Fluent (have lived in Spain for the last 5 years)
- **Catalan:** Basic (Good reading and understanding – have lived in Catalunya for the last 4 years)
- **Programming skills:** C, C++, JAVA, PHP, HTML5, CSS, KSH, SQL, BootStrap, Twig, Scala, Maple, Matlab, Scilab, R, JavaScript, Wordpress, LaTeX, Beamer.

EXTRA CURRICULUM INTERESTS

- Ski, Windsurf (summer seasonal teacher for 5years), Climbing, Highlining, Tennis / Fond of sports in general – especially mountain/water sports.
- Music (piano-guitar) – currently playing in a band.
- Reading – Books in French.
- *Staff Ski* President: Managing a 10-people team, to organize a ski week for 160 people over a year.

REFERENCES

BECKER Marc. Professor in 'Classes Préparatoires' MP*, in Lycée Massena, Nice. massena.becker@orange.fr

PERERA Francesc. (PhD Advisor) Doctor in Mathematics, Professor at Universitat Autònoma de Barcelona. perera@mat.uab.cat

ROBERT Leonel. (Principal Investigator) Doctor in Mathematics, Professor at University of Louisiana, Lafayette. leonel.robert@gmail.com

