Luis Diego Martínez Magán

Curriculum Vitae

Education

2008–2010 Superior Bachelor,

 $\label{eq:public_institute} \textit{Public Institute San Juan Bautista}, \, \mathsf{Madrid}, \, \textit{Overall Rating} - 9/10.$

Specialization in Science.

2010–2015 Double Graduate in Mathematics and Computer Engineering,

360 ECTS. Overall Rating – 8.5/10, Universidad Autónoma de Madrid –UAM.

2015-2016 Master in Mathematics and Applications,

60 ECTS. Overall Rating - 8.87/10, Universidad Autónoma de Madrid –UAM.

2016- PhD in Mathematical Engineering,

2021(expected) Universidad Carlos III de Madrid,

Advisor: Fernando Lledó.

Master thesis

Title Paradoxical Decompositions, Amenability and Applications.

Supervisor Professor Fernando Lledó, rating 10/10

Papers & articles

Sept. 12, '18 Notions of infinity in Quantum Physics.

Authors: Fernando Lledó, Diego Martínez.

February, '20 Amenability in semigroups and C*-algebras,

Authors: Pere Ara, Fernando Lledó, Diego Martínez,

J. Func. Anal. (2020) https://doi.org/10.1016/j.jfa.2020.108530.

April, '20 The uniform Roe algebra of an inverse semigroup,

Authors: Fernando Lledó, Diego Martínez, submitted.

Teaching experience

Winter '17 Linear Algebra (Problem Class, 30h),

Energy Engineering, 1st Year, UC3M.

Winter '18 Calculus I (Problem Class, 30h),

Aerospace Engineering, 1st Year, UC3M.

Research stays

May 2-5, '16 University of Münster, Germany,

Institute of Theoretical Mathematics.

- Nov. 15-17, Universidad Autonoma de Barcelona (UAB), Spain,
 - '17 CRM Centre de Recerca Matematica.
- June 25-28, Universidad Autonoma de Barcelona (UAB), Spain,
 - '18 CRM Centre de Recerca Matematica.
 - August- Texas A&M.
- December, Department of Mathematics, visiting as a Research Scholar.

'19

Talks (imparted)

- June 13, '16 Paradoxical Decompositions, Amenability and Applications, Universidad Carlos III de Madrid.
 - May 7, '18 Amenability in (Semi)-groups and Algebras, BYMAT conference (ICMAT), Madrid, Spain.
- June 6, '18 **Esquemas piramidales y porqué deberíamos pagar menos por las naranjas**, Junior seminar, UAM-UC3M-UCM-ICMAT, Madrid, Spain.
- June 25, '18 Amenability in semigroups and C*-algebras, UAB, Seminar in Ring Theory, Barcelona, Spain.
- Nov. 27, '18 Amenability in inverse semigroups and C*-algebras, UC3M, Madrid, Q-math research group.
- Dec. 11, '18 Amenability in inverse semigroups and C*-algebras,
 Universidad de Cádiz, II Joint Meeting Spain-Brazil in Mathematics, invited talk.
- March 19, '19 Inverse semigroup Roe algebras,
 Operator Algebras, Groups and Applications to Quantum Information, Workshop I.
- June 12, '19 Amenability in Inverse semigroup, Contributed talk in SandGAL-2019, Cremona, Italy.
- August 9, '19 Traces in inverse semigroup Roe algebras, YMC*A-2019, Copenhagen, Denmark.
- Sep. Nov., Reading seminar about quasidiagonality and the proof of the Tikuisis-White-Winter '19 theorem,
 Operator Algebras seminar, Texas A&M.
- Nov. 13, '19 **Quasidiagonality and relation to index and group theory**, Student Seminar in groups and dynamics, Texas A&M.
- Nov. 13, '19 Coarse geometry and inverse semigroups, GSO seminar, Texas A&M.
- Nov. 25, '19 Coarse geometry and inverse semigroups, Colloquia, University of Montana.
- Jan. 16, '20 **Quasi-diagonality and approximation of operators**, *Junior Seminar, ICMAT-UAM-UCM-UC3M*.
- Feb. 19, '20 Quasi-diagonality and finite-dimensional approximations, Q-Math seminar, UC3M.
- March 3, '20 Quasi-diagonality vs amenability of discrete groups, Group theory seminar, UAM.
 - May 6, '20 **Some quasi-isometric invariants for inverse semigroups**, Semigroup seminar of York, University of York.

Awards and grants

- 2012 BIT Summer School in Beijing,
 - Grant awarded to pay for an intensive course on chinese culture and language, Beijing Institute of Technology –BIT.
- 2015 **UAM Grant from the department of mathematics**,

 Grant intended to support the study of the Master in Mathem
 - Grant intended to support the study of the Master in Mathematics. One of the first 5, Universidad Autónoma de Madrid.

2016-2021 FPI - Severo Ochoa - Grant from the Ministry of Economy of Spain,

Grant created to support the fulfillment of the PhD in various areas, such as Mathematics, Universidad Carlos III de Madrid - ICMAT (Instituto de Ciencias Matemáticas).

Courses, schools and workshops (assisted to)

June - July '15 **JAE summer school of Mathematics**,

Instituto de Ciencias Matemáticas -ICMAT.

Nov. 11-15, **Derivations on Banach and C*-algebras**,

'15 Doctor Martin Mathieu (MRIA, Queen's University Belfast), Universidad Carlos III de Madrid –UC3M.

March 13-17, Advanced Course on Operator Algebras: Groupoids, Crossed Products and Rohklin

2017 Dimension,

Part of the Intensive Research Program Operator Algebras: Dynamics and Interactions, Centre de Recerca Matemàtica – Barcelona.

March 20-24, Workshop on C*-algebras and Dynamical Systems,

'17 Part of the Intensive Research Program Operator Algebras: Dynamics and Interactions, Centre de Recerca Matemàtica – Barcelona.

March 6-10, Group Theory, Quantum Correlation Sets and Tsirelson's Problem,

'17 William Slofstra,

ICMAT (Instituto de Ciencias Matemáticas) - Severo Ochoa.

Aug., 7-11, Young Mathematicians in C*-algebras (YMC*A),

'17 Department of Mathematical Sciences of the University of Copenhagen, Denmark.

Oct., 28-1, '17 Workshop on Operator Algebras, Geometry and Actions,

Banach Center in Warsaw, Poland.

Nov. 16-17, Barcelona weekend on operator algebras,

'18 Centre de Recerca Matemàtica - Barcelona.

Dec. 11-14, II joint meeting Spain-Brazil in Mathematics,

'18 Universidad de Cádiz - Cádiz.

Courses, schools and workshops (organized)

June 26th-July Organizer of Escuela JAE Intro 2017,

7th, '17 ICMAT (Instituto de Ciencias Matemáticas) - Severo Ochoa.

March-June, Thematic Research Program: Operator Algebras, Groups and Applications to Quan-

2019 **tum Information**, *ICMAT* (*Instituto de Ciencias Matemáticas*) – *Severo Ochoa*, https://www.icmat.es/RT/2019/OAGAQI/index.php.

Sep. 2019 - Junior seminar,

Dec. 2020 ICMAT (Instituto de Ciencias Matemáticas) - Severo Ochoa.

Other courses and miscellanea

2009 Seventh grade in spoken English,

Trinity College London.

2012 BIT Summer School in Beijing,

Beijing Institute of Technology -BIT.

- 2017 Dándole vueltas al infinito, Divulgation newspaper article, El País.
- 2019 Ganar juegos usando la mecánica cuántica, Divulgation newspaper article, El País.

Languages

Spanish Mother tongue
English Advanced (C1)

2014 Certificate in Advanced English, Cambridge English.

Exceptional in Writing