

Diego Martínez (cv)

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EDUCATION

Ph.D. University: *Universidad Carlos III de Madrid* (UC3M) and *Instituto de Ciencias Matemáticas* (ICMAT)
Supervisor: *Fernando Lledó*, Program: *Ph.D. in Mathematical Engineering* (international distinction)

Thesis: *Amenability and coarse geometry of (inverse) semigroups and C^* -algebras*

From September 2016 to March 2021 (expected)

Master University: *Universidad Autónoma de Madrid* (UAM)
Supervisor: *Fernando Lledó*, Program: *Master Program in Mathematics and Applications* (60 ects)

Thesis: *Amenability, paradoxical decompositions and applications* rating 10/10

From September 2015 to July 2016

Degree University: *Universidad Autónoma de Madrid* (UAM)
Program: *Double graduate in Computer Engineering and Mathematics* (360 ects)

Thesis: *Entropía y códigos de Huffman* (in Spanish) rating 10/10

From September 2010 to June 2015

PUBLICATIONS

- [3] F. Lledó and D. Martínez, *The uniform Roe algebra of an inverse semigroup*, (2020) submitted <https://arxiv.org/abs/2004.01890>.
- [2] P. Ara, F. Lledó and D. Martínez, *Amenability and paradoxicality in semigroups and C^* -algebras*, J. Func. Anal. **279** (2020) 108530 (pp. 43) <https://doi.org/10.1016/j.jfa.2020.108530>.
- [1] F. Lledó and D. Martínez, *Notions of infinity in quantum physics*, 60 Years Alberto Ibort Fest Classical and Quantum Physics, Chapter 14, Springer (2019) https://doi.org/10.1007/978-3-030-24748-5_14.

SELECTED INTERNATIONAL TALKS

- *Amenability in inverse semigroups and C^* -algebras*, Universidad de Cádiz II Joint Meeting Spain-Brazil in Mathematics, Cádiz, Spain Dec. 2018
- *Amenability in inverse semigroups*, University of Cremona SandGAL-2019, Cremona, Italy June 2019
- *Traces in inverse semigroup Roe algebras*, University of Copenhagen YMC*A, Copenhagen, Denmark Aug. 2019
- *Coarse geometry and inverse semigroups*, University of Montana, Colloquium talk, Missoula, Montana, USA Nov. 2019
- *Some quasi-isometric invariants for inverse semigroups*, University of York (online talk) York semigroup, York, United Kingdom May 2020

TEACHING

- TFG committee member at UC3M Fall 2020
- TFG committee member at UC3M Spring 2019
- Student Teaching Assistant at UC3M Fall 2018
Calculus I, group 45. Bachelor in Aerospace Engineering
- Student Teaching Assistant at UC3M Fall 2017
Linear Algebra I, group 49. Bachelor in Energy Engineering

SCHOLARSHIPS AND AWARDS

- Formación de personal investigador (FPI) - Severo Ochoa 2017 – 2021
Grant supporting the fulfillment of the PhD from the MINECO (Spanish Ministry of Economy)
- Mathematics Department Scholarship (UAM) 2015 – 2016
Grant intended to support the study of the Master in Mathematics (one of the top 5)
- BIT Summer School in Beijing 2012
Grant awarded to pay for an intensive course on chinese culture and language

RESEARCH VISITS

- University of Münster, Germany May 2016
Institute of Theoretical Mathematics
- UAB, Spain Nov. 2017
Centre de Recerca Matemática
- UAB, Spain June 2018
Centre de Recerca Matemática
- Texas A&M, USA Aug.–Dec. 2019
Department of Mathematics

ORGANIZER OF

- Junior Seminar, ICMAT Sep. 2018–now
Local seminar for Ph.D. students
- OAGAQI thematic semester, March–June 2019
Thematic semester about operator algebras, groups and applications to quantum information
- JAE School, ICMAT June 2017
School that serves as an introduction to research for undergraduate students

OUTREACH

- Outreach newspaper article in *El País* 2019
– *Ganar juegos usando la mecánica cuántica*
- Outreach newspaper article in *El País* 2017
– *Dándole vueltas al infinito*

LANGUAGES

- Spanish: Native
- English: Advanced (C1)
– Certificate in Advanced English, Exceptional

LIST OF ALL TALKS

- Amenability in (Semi)-groups and Algebras, ICMAT May 2018
Bringing Young Mathematicians Together (BYMAT) – Madrid, Spain
- Esquemas piramidales y porqué deberíamos pagar menos por las naranjas, ICMAT June 2018
Junior seminar (ICMAT–UAM–UCM–UC3M) – Madrid, Spain
- Amenability in semigroups and C^* -algebras, UAB June 2018
Seminar in Ring Theory, Universitat Autònoma de Barcelona – Barcelona, Spain
- Amenability in inverse semigroups and C^* -algebras, UC3M Nov. 2018
Q-Math research group, Mathematics Department – Madrid, Spain
- Amenability in inverse semigroups and C^* -algebras, Universidad de Cádiz Dec. 2018
II Joint Meeting Spain-Brazil in Mathematics – Cádiz, Spain

- *Inverse semigroup Roe algebras*, ICMAT
OAGAQI thematic semester, Workshop I – Madrid, Spain March 2019
- *Amenability in inverse semigroups*, University of Cremona
SandGAL-2019 – Cremona, Italy June 2019
- *Traces in inverse semigroup Roe algebras*, University of Copenhagen
YMC*A – Copenhagen, Denmark Aug. 2019
- Reading seminar on operator algebras, Texas A&M
Reading seminar on quasi-diagonality and related topics – College Station, Texas, USA Sep. - Nov. 2019
- *Quasi-diagonality and relation to index and group theory*, Texas A&M
Student seminar in groups and dynamics – College Station, Texas, USA Nov. 2019
- *Coarse geometry and inverse semigroups*, Texas A&M University
GSO seminar – College Station, Texas, USA Nov. 2019
- *Coarse geometry and inverse semigroups*, University of Montana,
Colloquium talk – Missoula, Montana, USA Nov. 2019
- *Quasi-diagonality and approximation of operators*, ICMAT
Junior seminar (ICMAT–UAM–UCM–UC3M) – Madrid, Spain Jan. 2020
- *Quasi-diagonality and finite-dimensional approximations*, UC3M
Q-Math research group, Mathematics Department – Madrid, Spain Feb. 2020
- *Quasi-diagonality vs amenability of discrete groups*, UAM
Group theory seminar – Madrid, Spain March 2020
- *Some quasi-isometric invariants for inverse semigroups*, University of York (online talk)
York semigroup – York, United Kingdom May 2020