



Iván Blanco Chacón

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Date of document: 21/05/2020

v 1.4.0

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Summary of CV

This section describes briefly a summary of your career in science, academic and research; the main scientific and technological achievements and goals in your line of research in the medium -and long- term. It also includes other important aspects or peculiarities.

Since August 2019 I am an assistant professor (profesor ayudante doctor) at the School of Science (Mathematics Department) of University of Alcalá de Henares. Formerly, I was a postdoctoral researcher at University College Dublin (3 years 8 months) and at Aalto University, Finland (2 years 4 months). Before that, I did my PhD at the University of Mathematics, specialising in algebraic number theory in 2012, with an FPI fellowship (2 years of grant and 2 years of contract).

My research interests are algebraic number theory (modularity, automorphic forms on Hilbert modular surfaces and Shimura curves and special cycles and their relation in the equivariant version of the Birch and Swinnerton-Dyer conjecture), coding theory (STBC and nonlinear codes for the physical layer) and postquantum cryptography (lattice based methods, RLWE/PLWE and homomorphic encryption).

I have been in several invited stays (McGill University, 6 months; Institute for Advanced Study, 1 month; Università degli Studi di Perugia, 5 weeks, University of Illinois at Urbana-Champaign 2 weeks and EPFL, 1 month). I am author of 15 publications (8 in the JCR, 1 in the Q1). My teaching experience is in teaching 8 undergrad courses, designing some of them, 3 Master courses; I have directed a final degree assignment in Aalto (10 ECTS) and I am now directing 5 of these assignments at the UAH.

I have participated in national and international conferences, both as invited or as a contributed speaker and I have organised the TANDeM conference in 2013 (a conference in pure and applied number theory), with the aid of ICMAT and the University Complutense of Madrid.

I have also given specialised invited courses (BCAM, Aalto, Urbana-Champaign and ICIAM) and recently I am also doing divulgative activities: I organised a cycle of divulgative conferences with the aid of the Public Network of Libraries of the Comunidad de Madrid, several high-school presentations and an article in general press.



Iván Blanco Chacón

Surname(s): **Blanco Chacón**
 Name: **Iván**
 DNI: **50214415**
 Date of birth: **08/03/1978**
 Gender: **Male**
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Current professional situation

Employing entity: University of Alcalá de Henares **Type of entity:** University

Department: Sciences

Professional category: Assistant professor (ayudante doctor)

Start date: 01/08/2019

Dedication regime: Full time

Performed tasks: Fundamental research in algebraic number theory, algebraic geometry, cryptography and coding theory. Teaching of undergraduate and graduate modules. Supervising PhD students.

Previous positions and activities

	Employing entity	Professional category	Start date
1	University College Dublin	Postdoctoral researcher level II	01/01/2017
2	University College Dublin	Postdoctoral Researcher level I	01/01/2015
3	Aalto University	Postdoctoral researcher	01/01/2013
4	Turku University	Postdoctoral researcher	01/09/2012
5	Universitat de Barcelona	Part time lecturer (Profesor Asociado)	01/09/2011
6	Universitat de Barcelona	predoctoral FPI researcher	01/07/2009
7	Institute for Advanced Study	Teaching Assistant	28/06/2009
8	Universitat de Barcelona	predoctoral grant FPI	01/07/2007

1 **Employing entity:** University College Dublin **Type of entity:** University
Professional category: Postdoctoral researcher level II
Start-End date: 01/01/2017 - 31/08/2018

2 **Employing entity:** University College Dublin **Type of entity:** University
Professional category: Postdoctoral Researcher level I
Start-End date: 01/01/2015 - 31/12/2016 **Duration:** 2 years



- 3** **Employing entity:** Aalto University **Type of entity:** University
Professional category: Postdoctoral researcher
Start-End date: 01/01/2013 - 31/12/2014 **Duration:** 2 years
- 4** **Employing entity:** Turku University **Type of entity:** University
Professional category: Postdoctoral researcher
Start-End date: 01/09/2012 - 31/12/2012
- 5** **Employing entity:** Universitat de Barcelona **Type of entity:** University
Professional category: Part time lecturer (Profesor Asociado)
Start-End date: 01/09/2011 - 31/08/2012
- 6** **Employing entity:** Universitat de Barcelona **Type of entity:** University
Professional category: predoctoral FPI researcher
Start-End date: 01/07/2009 - 01/07/2011
- 7** **Employing entity:** Institute for Advanced Study **Type of entity:** Public Research Body
Professional category: Teaching Assistant
Start-End date: 28/06/2009 - 18/07/2009
- 8** **Employing entity:** Universitat de Barcelona **Type of entity:** University
Professional category: predoctoral grant FPI
Start-End date: 01/07/2007 - 01/07/2009



Education

University education

1st and 2nd cycle studies and pre-Bologna degrees

- 1 **University degree:** Higher degree
Name of qualification: Máster en Investigación Matemática
Degree awarding entity: Facultad de Ciencias Matemáticas Universidad Complutense de Madrid
Date of qualification: 09/2007
- 2 **University degree:** Higher degree
Name of qualification: Licenciado en Matemáticas Especialidad Matemática Fundamental
Degree awarding entity: Facultad de Ciencias Matemáticas Universidad Complutense de Madrid
Date of qualification: 06/2006

Doctorates

Doctorate programme: Programa Oficial de Doctorado en Investigación Matemática
Degree awarding entity: Facultad de Ciencias Matemáticas Universidad Complutense de Madrid
Date of degree: 07/2012
Type of entity: University

Specialised, lifelong, technical, professional and refresher training (other than formal academic and healthcare studies)

- 1 **Training title:** Certificado de Nivel Avanzado en Inglés (5º curso)
Awarding entity: Escuela Oficial de Idiomas de Barcelona
End date: 06/2011
Type of entity: School
- 2 **Training title:** Curso de programación en plataforma .Net
Awarding entity: INEM
End date: 06/2003
Type of entity: Employment Agency
Duration in hours: 300 hours
- 3 **Training title:** Curso de Programación orientada a objetos con C++
Awarding entity: INEM
End date: 06/1999
Type of entity: Employment Agency
Duration in hours: 200 hours



Attended advanced, improvement and innovative teacher training and new technology courses and seminars focused on improving teaching

- Title of course/seminar:** Aalto Peda Intro
Goals of the course/seminar: 5 ECTS course of pedagogy. Teaching techniques, from a practical point of view, and as supported by theoretical pedagogical schools
Organising entity: Aalto University **Type of entity:** University
Faculty, institute or centre: Strategic Support for Research and Innovation
Duration in hours: 150 hours
Start-End date: 19/09/2014 - 01/12/2014
- Title of course/seminar:** Tools for teaching-training
Goals of the course/seminar: tools for teachings session, supporting student's learning and motivation
Organising entity: Aalto University
Duration in hours: 6 hours
Start-End date: 10/12/2013 - 10/12/2013

Language skills

Language	Listening skills	Reading skills	Spoken interaction	Speaking skills	Writing skills
Finnish		A1	A1	A1	A1
German		B1	A1	A1	B1
English		C1	C1	C1	C1

Teaching experience

General teaching experience

- Name of the course:** Advanced Linear Algebra
University degree: Mathematics
Start date: 06/09/2016 **End date:** 22/01/2017
End date: 22/12/2016
Entity: University College Dublin **Type of entity:** University
Faculty, institute or centre: School of Mathematical Science
- Name of the course:** Advanced Linear Algebra
University degree: Mathematics
Start date: 06/09/2015 **End date:** 27/11/2015
Entity: University College Dublin **Type of entity:** University
Faculty, institute or centre: School of Mathematics and Statistics
- Name of the course:** Algebraic Number Theory II
University degree: Mathematics
Start date: 10/2014 **End date:** 12/2014
Entity: Aalto University School of Science **Type of entity:** University



Faculty, institute or centre: Department of Mathematics and Systems Analysis

- 4** **Name of the course:** Galois Theory
University degree: Mathematics
Start date: 04/02/2013 **End date:** 07/03/2014
Entity: Aalto University School of Science **Type of entity:** University Department
Faculty, institute or centre: Department of Mathematics and Systems Analysis
- 5** **Name of the course:** Elliptic Curves
University degree: Mathematics
Start date: 07/01/2014 **End date:** 14/02/2014
Entity: Aalto University School of Science **Type of entity:** University Department
Faculty, institute or centre: Department of Mathematics and Systems Analysis
- 6** **Name of the course:** Algebraic Number Theory I
University degree: Mathematics
Start date: 04/11/2013 **End date:** 13/12/2013
Entity: Aalto University School of Science **Type of entity:** University Department
Faculty, institute or centre: Department of Mathematics and Systems Analysis
- 7** **Name of the course:** Matemáticas
University degree: Grado en Química
Start date: 09/01/2012 **End date:** 08/06/2012
Entity: Universitat de Barcelona **Type of entity:** University
Faculty, institute or centre: Facultat de Química
- 8** **Name of the course:** Álgebra Lineal
University degree: Graduado o Graduada en Ingeniería Química
Start date: 03/10/2011 **End date:** 10/01/2012
Entity: Universitat de Barcelona **Type of entity:** University
Faculty, institute or centre: Facultat de Química
- 9** **Name of the course:** Álgebra lineal (Problemas)
University degree: Grado en Matemáticas
Start date: 01/03/2011 **End date:** 03/06/2011
Entity: Universitat de Barcelona **Type of entity:** University
Faculty, institute or centre: Facultat de Matemáticas
- 10** **Name of the course:** Aritmética (Problemas)
University degree: Grado en Matemáticas
Start date: 04/10/2010 **End date:** 10/01/2011
Entity: Universitat de Barcelona **Type of entity:** University
Faculty, institute or centre: Facultat de Matemáticas
- 11** **Name of the course:** Álgebra I (problemas)
University degree: Licenciatura en Matemáticas
Start date: 02/2010 **End date:** 06/2010
Entity: Universitat de Barcelona **Type of entity:** University
Faculty, institute or centre: Facultat de Matemáticas



Experience supervising doctoral thesis and/or final year projects

- 1 Project title:** Elliptic Curve Factoring, Torsion and Edwards/Hessian Curves, MSc thesis
Entity: University College Dublin
Student: Oisin Robinson
Date of reading: 03/09/2016
- 2 Project title:** Complex elliptic curves and Jacobi theta functions, Special Bachelor Assignment
Entity: Aalto University **Type of entity:** University
Student: Tuomas Tajakka
Date of reading: 09/2013
- 3 Project title:** Algebraic tools for the design of Space-Time Block codes, PhD thesis (provisional)
Entity: Aalto University
Student: Amaro Barreal Fernández

Other activities/achievements not included above

- 1 Description of the activity:** Training for the Irish Mathematical Olympiad
Organising entity: Irish Mathematical Trust **Type of entity:** Foundation
End date: 21/01/2017
- 2 Description of the activity:** Organization and tuition of the advanced seminar "Heegner points, complex multiplication and the Birch and Swinnerton-Dyer Conjecture"
Organising entity: Aalto University
End date: 11/2014
- 3 Description of the activity:** Organization and tuition of an advanced seminar "Aalto Seminar on Shimura Curves"
Organising entity: Aalto University School of Science **Type of entity:** University
End date: 12/2013
- 4 Description of the activity:** Instructor in the Millenium Youth Camp (international summer school for talented high school students)
Organising entity: Aalto University and Helsinki University
End date: 06/2013
- 5 Description of the activity:** Teaching Assistant for the Course "Heegner points and complex multiplication" at Park City Mathematics Institute 2009
Organising entity: Institute for Advanced Study, Princeton University **Type of entity:** R&D Centre
End date: 19/07/2009
- 6 Description of the activity:** Organization and tuition of the advanced course "Modular forms"
Organising entity: Departamento de Álgebra (UCM) **Type of entity:** University Department
End date: 05/2009



Scientific and technological experience

Scientific or technological activities

R&D projects funded through competitive calls of public or private entities

- 1** **Name of the project:** Applied algebra and number theory in robust and secure wireless cloud storage systems (Academy of Finland Project 276031)
Entity where project took place: Aalto University School of Science
City of entity: Espoo, Etelä-Suomi, Finland
Nº of researchers: 10
Funding entity or bodies:
Academy of Finland
Start-End date: 01/09/2014 - 31/08/2018
- 2** **Name of the project:** Algebraic and automorphic methods in security ICT 2023
Entity where project took place: Aalto University School of Science
City of entity: Espoo, Etelä-Suomi, Finland
Name principal investigator (PI, Co-PI....): Camilla Hollanti
Nº of researchers: 10
Start-End date: 01/07/2014 - 30/06/2016
- 3** **Name of the project:** MTM2010-17389: Moduli Spaces: Algebraic, Arithmetic and Topological questions
Entity where project took place: INSTITUTO DE CIENCIAS MATEMATICAS
Type of entity: State agency
City of entity: Madrid, Community of Madrid, Spain
Nº of researchers: 15
Start-End date: 01/09/2012 - 31/12/2014
Total amount: 110.000 €
- 4** **Name of the project:** Applications of Class Field Theory in Present and Future Multi-Antenna Communications, Academy of Finland Project 131745
Entity where project took place: Aalto University School of Science
Type of entity: University Department
City of entity: Espoo, Etelä-Suomi, Finland
Nº of researchers: 9
Start-End date: 01/09/2009 - 31/12/2012
- 5** **Name of the project:** MTM2007-63582: Geometría Algebraica y Aritmética
Entity where project took place: INSTITUTO DE CIENCIAS MATEMATICAS
Type of entity: State agency
City of entity: Madrid, Community of Madrid, Spain
Nº of researchers: 15



- 6 Name of the project:** SFI 13/IA/1914 Theory and Application for the Discrete Logarithm Problem in Finite Fields: setting a Cryptographic World Record
Entity where project took place: University College **Type of entity:** University
Dublin
City of entity: Dublin, Ireland
N° of researchers: 10

R&D non-competitive contracts, agreements or projects with public or private entities

- 1 Name of the project:** ICT COST Action IC1104: Random Network Coding and Designs over $GF(q)$
Degree of contribution: Researcher
- 2 Name of the project:** The DVB project
Degree of contribution: Researcher

Scientific and technological activities

Scientific production

Publications, scientific and technical documents

- 1** Iván Blanco Chacón. On the RLWE/PLWE equivalence for cyclotomic number fields. Applicable Algebra in Engineering, Communication and Computing. 01/05/2020.
Type of production: Scientific paper **Format:** Scientific and technical document or report
- 2** Iván Blanco Chacón; Michele Fornea. Twisted triple product p-adic L-functions and Hirzebruch-Zagier cycles. Journal of the Institute of Mathematics of Jussieu. pp. 1 - 46. 01/12/2019.
Type of production: Scientific paper **Format:** Scientific and technical document or report
- 3** Iván Blanco Chacón; Gary McGuire. Primes of the form $n^2 + n + p$ have density 1. Journal of Combinatorics and Number Theory. 9 - 3, pp. 155 - 167. 01/06/2018.
Type of production: Scientific paper **Format:** Scientific and technical document or report
- 4** Iván Blanco Chacón; Alberto Fernández Boix; Emrah Sercan Yilmaz; Stiofáin Fordham. Differential operators and hyperelliptic curves over finite fields. Finite Fields and their Applications. 51, pp. 351 - 370. 01/05/2018.
Type of production: Scientific paper **Format:** Scientific and technical document or report
- 5** Iván Blanco Chacón; Eimear Byrne; Iwan Duursma; John Sheekey. Rank metric codes and zeta functions. Designs, Codes and Cryptography. 86 - 8, pp. 1767 - 1792. 01/02/2018.
Type of production: Scientific paper **Format:** Scientific and technical document or report
Corresponding author: Yes
- 6** Ivan Blanco Chacon; Camilla Hollanti; Montserrat Alsina Aubach; Dionis Remon Adell. Fuchsian codes with arbitrarily high code rates. Journal of pure and applied algebra. 220 - 1, pp. 180 - 196. Elsevier, 2016.
Type of production: Scientific paper **Format:** Journal
Corresponding author: Yes



- 7** Ivan Blanco Chacon; Dionis Remon Adell; Camilla Hollanti; Montserrat Alsina Aubach. Nonuniform Fuchsian codes for noisy channels. Journal of the Franklin Institute. 351 - 11, pp. 5076 - 5098. Elsevier, 2014.
Type of production: Scientific paper **Format:** Journal
Corresponding author: Yes
- 8** Iván Blanco Chacón. A higher order p-adic class number formula. P-adic Numbers, Ultrametric Analysis and Applications. 5 - 3, pp. 236 - 239. Springer, 2013.
Type of production: Scientific paper **Format:** Journal
Corresponding author: Yes
- 9** David Karpuk; Iván Blanco Chacón; Camilla Hollanti. Proceedings of the IEEE ISIT 2013. Probability bounds for an eavesdropper's correct decision over a MIMO wiretap channel. 1 - 1, pp. 2014 - 2018. IEEE, 2013.
Type of production: Scientific paper **Format:** Book
- 10** Iván Blanco Chacón; Pilar Bayer Isant. Quadratic modular symbols on Shimura curves. Journal de Théorie des Nombres de Bordeaux. 25 - 2, pp. 261 - 283. Institut de Mathématiques de Bordeaux, 2013.
Type of production: Scientific paper **Format:** Journal
- 11** Iván Blanco Chacón; Pilar Bayer Isant. Quadratic modular symbols. Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales Serie A (RACSAM). 106 - 2, pp. 429 - 441. Springer, 2012.
Type of production: Scientific paper **Format:** Journal
- 12** Iván Blanco Chacón. Upper triangular operators and p-adic L-functions. P-adic numbers, Ultrametric Analysis and Applications. 3 - 2, pp. 1 - 16. Springer, 2011.
Type of production: Scientific paper **Format:** Journal
Corresponding author: Yes
- 13** Iván Blanco Chacón; Robin Chapman; Stiofáin Fordham; Gary McGuire. Divisibility of L-Polynomials for a Family of Curves. Contemporary Developments in Finite Fields and Applications. pp. 1 - 10. World Scientific, 01/08/2016.
Type of production: Book chapter **Format:** Book
Corresponding author: Yes
- 14** Iván Blanco Chacón; Dionís Remón Adell; Camilla Hollanti. Fuchsian codes for AWGN codes. Proceedings of the WCC 2013. 1 - 1, pp. 496 - 507. Bergen University, 2013.
Type of production: Book chapter **Format:** Book
Corresponding author: Yes
- 15** Review of the paper "An infinite family of Serre curves". Mathematical Reviews. American Mathematical Society, 01/11/2016.
Type of production: Review
- 16** Review of the paper "Tate gamma-factors attached to quadratic characters.". Mathematical Reviews. American Mathematical Society, 03/10/2016.
Type of production: Review **Format:** Scientific and technical document or report
- 17** Review of the paper "On the ratio of Tate-Shafarevich groups over cyclic extensions of order p^2 ", by Hoseog Yu. Mathematical Reviews. American Mathematical Society, 2015.
Type of production: Review **Format:** Scientific and technical document or report
- 18** Review of the paper "On the special values of L-functions of CM-base change for Hilbert modular forms" by Christian Virdol. Mathematical Reviews. American Mathematical Society, 2015.
Type of production: Review **Format:** Scientific and technical document or report



- 19** Review of the paper "The Teitelbaum conjecture in the indefinite setting", by Marco Adamo Seveso. Mathematical Reviews. American mathematical Society, 2015.
Type of production: Review **Format:** Scientific and technical document or report

Works submitted to national or international conferences

- 1** **Title of the work:** Optimal partitioning of large distributed databases and allocation of computational resources
Name of the conference: European Study Group with Industry 118th
Corresponding author: Yes
City of event: Dublin, Southern and Eastern, Ireland
Date of event: 04/07/2016
End date: 08/07/2016
Organising entity: European Consortium for Mathematics in Industry **Type of entity:** Public Research Body
City organizing entity: Dublin, Southern and Eastern, Ireland
 Eimear Byrne; Iván Blanco Chacón; Aviv Gibali; Selma Shun. "Optimal partitioning of large distributed databases and allocation of computational resources".
- 2** **Title of the work:** Arithmetic Fuchsian groups and wireless communications
Name of the conference: Seminar of Algebraic Geometry
City of event: Madrid, Community of Madrid, Spain
Date of event: 10/2013
Organising entity: Departamento de Álgebra (UCM) **Type of entity:** University Department
City organizing entity: Madrid, Community of Madrid, Spain
- 3** **Title of the work:** Aplicaciones recientes de la teoría algebraica de números a las telecomunicaciones (Recent applications of the Algebraic Number Theory to Wireless Communications)
Name of the conference: Segundas Jornadas de Jóvenes investigadores RSME
City of event: Sevilla, Andalusia, Spain
Date of event: 09/2013
Organising entity: Instituto de Matemática Universidad de Sevilla (IMUS) **Type of entity:** University Research Institute
City organizing entity: Sevilla, Andalusia, Spain
 "Aplicaciones recientes de la teoría algebraica de números a las telecomunicaciones (Recent applications of the Algebraic Number Theory to Wireless Communications)".
- 4** **Title of the work:** Fuchsian codes with arbitrary rates
Name of the conference: Cost action IC1104 meeting
City of event: Ghent, Belgium
Date of event: 09/2013
Organising entity: COST **Type of entity:** Associations and Groups
City organizing entity: Ghent, Belgium
- 5** **Title of the work:** Símbolos Modulares Cuadráticos (Quadratic Modular Symbols)
Name of the conference: Segundas Jornadas de Jóvenes Investigadores RSME
City of event: Sevilla, Andalusia, Spain
Date of event: 09/2013
Organising entity: Instituto de Matemática de la Universidad de Sevilla (IMUS) **Type of entity:** University Research Institute



City organizing entity: Sevilla, Andalusia, Spain
"Símbolos Modulares Cuadráticos (Quadratic Modular Symbols)".

- 6** **Title of the work:** p-adic L-functions attached to Shimura curves
Name of the conference: Second Arctic Number Theory Seminar
City of event: Saariselkä, Pohjois-Suomi, Finland
Date of event: 06/2013
Organising entity: Oulu University **Type of entity:** University
City organizing entity: Oulu, Pohjois-Suomi, Finland
- 7** **Title of the work:** On the order of vanishing of the Mazur-Tate-Teitelbaum p-adic L- functions and related topics
Name of the conference: Lukuteorian päivät (Number Theory Days)
City of event: Turku, Länsi-Suomi, Finland
Date of event: 05/2013
Organising entity: Turku University **Type of entity:** University
City organizing entity: Turku, Länsi-Suomi, Finland
- 8** **Title of the work:** Fuchsian codes for AWGN channels
Name of the conference: International Workshop on Coding and Cryptography
City of event: Bergen, Norway
Date of event: 2013
Organising entity: Bergen University **Type of entity:** University
City organizing entity: Bergen, Norway
Iván Blanco Chacón; Dionís Remón Adell. "Probability bounds for an eavesdropper's correct decision over a MIMO wiretap channel".
- 9** **Title of the work:** Fuchsian codes with arbitrary rates
Name of the conference: AICA (Aplicaciones industriales del álgebra computacional)
City of event: Madrid, Spain
Date of event: 2013
Organising entity: Universidad Complutense de Madrid **Type of entity:** University
City organizing entity: Madrid, Spain
Iván Blanco Chacón; Dionís Remón Adell; Camilla Hollanti. "Fuchsian codes with arbitrary rates".
- 10** **Title of the work:** Probability bounds for an eavesdropper's correct decision over a MIMO wiretap channel
Name of the conference: IEEE International Symposium on Information Theory (ISIT)
City of event: Istanbul, Turkey
Date of event: 2013
Organising entity: IEEE **Type of entity:** Associations and Groups
City organizing entity: New York, United States of America
David Karpuk; Iván Blanco Chacón. "Probability bounds for an eavesdropper's correct decision over a MIMO wiretap channel".
- 11** **Title of the work:** p-adic analogues of the Birch and Swinnerton-Dyer conjecture
Name of the conference: p-adic analogues of the Birch and Swinnerton Dyer-conjecture
City of event: Madrid, Community of Madrid, Spain
Date of event: 2012
Organising entity: Departamento de álgebra de la Universidad Complutense de Madrid **Type of entity:** University Department



City organizing entity: Madrid, Community of Madrid, Spain

- 12 Title of the work:** Rational points on modular elliptic curves
Name of the conference: Workshop of young researchers of the University Complutense of Madrid
City of event: Madrid, Community of Madrid, Spain
Date of event: 2007
Organising entity: Universidad Complutense de Madrid **Type of entity:** University
City organizing entity: Madrid, Community of Madrid, Spain

R&D management and participation in scientific committees

Scientific, technical and/or assessment committees

Committee title: The DVB project
Primary (UNESCO code): 332500 - Telecommunications technology
Affiliation entity: Panasonic **Type of entity:** R&D Centre
City affiliation entity: Frankfurt, Rheinhessen-Pfalz, Germany

Organization of R&D activities

Title of the activity: TANdeM (Teoría Algebraica de Números de Madrid)
Type of activity: Workshop and Conference **Geographical area:** National
Convening entity: Departamento de Álgebra (UCM) **Type of entity:** University Department
City convening entity: Madrid, Community of Madrid, Spain
Start date: 27/05/2013 **Duration:** 7 days

Evaluation and revision of R&D projects and articles

- 1 Name of the activity:** Referee
Performed tasks: Referee
Entity where activity was carried out: Journal of Number Theory
- 2 Name of the activity:** Review of articles
Performed tasks: Referee
Entity where activity was carried out: Journal of pure and applied algebra
- 3 Name of the activity:** review of articles
Performed tasks: Referee
Entity where activity was carried out: Computational and applied mathematics
- 4 Name of the activity:** review of articles
Performed tasks: Referee
Entity where activity was carried out: The International Workshop in Codind and Cryptography WCC2013
City of entity: Bergen, Norway



- 5** **Name of the activity:** review of articles
Performed tasks: Referee
Entity where activity was carried out: International Symposium in Information Theory IEEE ISIT2014
City of entity: Honolulu, United States of America
- 6** **Name of the activity:** Reviewer
Performed tasks: Reviewer
Entity where activity was carried out: American Mathematical Society

Other achievements

Stays in public or private R&D centres

- 1** **Entity:** Universitat Politècnica de Catalunya **Type of entity:** University
Faculty, institute or centre: Facultad de Matemáticas y Estadística
City of entity: Barcelona, Catalonia, Spain
Start-End date: 11/07/2016 - 23/07/2016
Goals of the stay: Guest
Provable tasks: Research
- 2** **Entity:** Instituto de Matemática **Type of entity:** University Research Institute
Faculty, institute or centre: IMUB
City of entity: Barcelona, Catalonia, Spain
Start-End date: 20/01/2014 - 10/02/2014
Goals of the stay: Guest
Provable tasks: Research
- 3** **Entity:** Institute for Advanced Study-Park City Mathematics Institute
City of entity: Park City, United States of America
Start-End date: 29/06/2009 - 17/07/2009
Goals of the stay: Contracted
- 4** **Entity:** McGill University **Type of entity:** University
City of entity: Montréal, Canada
Start-End date: 03/01/2008 - 03/07/2008
Goals of the stay: Doctorate
Provable tasks: Research

Obtained grants and scholarships

- 1** **Name of the grant:** Contrato de formación de personal investigador (FPI)
Aims: Pre-doctoral
Awarding entity: Ministerio de Ciencia e Innovación. **Type of entity:** Ministry Investigación
Conferral date: 07/2009 **Duration:** 2 years
End date: 07/2011
Entity where activity was carried out: Universitat de Barcelona
Faculty, institute or centre: Facultad de Matemáticas



- 2** **Name of the grant:** Formación del personal Investigador (FPI)
Aims: Pre-doctoral
Awarding entity: Ministerio de Ciencia e Innovación. **Type of entity:** Ministry Investigación
Conferral date: 07/2007 **Duration:** 2 years
End date: 07/2009
Entity where activity was carried out: Universitat de Barcelona
Faculty, institute or centre: Facultad de Matemáticas
- 3** **Name of the grant:** Grant for attending the Scuola Matematica Interuniversitaria 2006
Aims: Summer training School
Awarding entity: University of Perugia **Type of entity:** University
Conferral date: 07/2006
End date: 09/2006
Entity where activity was carried out: University of Perugia
Faculty, institute or centre: Department of Mathematics
- 4** **Name of the grant:** Beca de Colaboración
Aims: Introduction to research
Awarding entity: Universidad Complutense de Madrid **Type of entity:** University
Conferral date: 09/2005
End date: 06/2006
Entity where activity was carried out: Universidad Complutense de Madrid
Faculty, institute or centre: Departamento de Matemática Aplicada (UCM)

Scientific societies and professional associations

- 1** **Name of the society:** Irish Mathematical Trust
Affiliation entity: University College Dublin **Type of entity:** Foundation
City affiliation entity: Dublin, Southern and Eastern, Ireland
Start date: 01/03/2016
- 2** **Name of the society:** Membership
Affiliation entity: Institute of Electrical and Electronic Engineers **Type of entity:** Associations and Groups
City affiliation entity: New York, United States of America
Start date: 09/2012

Co-operation networks

Name of the network: Random Network Coding and Designs over $GF(q)$
Identification of the network: COST Action IC1104
Start date: 11/2012