



Edgar Martínez Moro

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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.

Desde el comienzo de mi recorrido investigador mi principal interés ha sido la teoría algebraica de códigos, especialmente las conexiones de dicha teoría con aspectos relacionados con la geometría algebraica y la combinatoria.

En una primera etapa mi investigación se centró en la descripción de esquemas de asociación ligados a métricas de codificación y su manipulación simbólica (esencialmente utilizando técnicas relativas a bases de Gröbner). Éste tipo de tópicos y técnicas son aún importantes en mi actual investigación.

En la etapa actual estoy centrado en tres líneas principales,

- Códigos polinomiales (aditivos y lineales) definidos sobre anillos finitos, incluyendo la clasificación de dichos anillos para órdenes pequeños.
- Métodos de descodificación por síndrome basados en técnicas de descenso por gradiente, incluyendo técnicas combinatorias de cálculo de palabras minimales.
- Criptografía postcuántica basada en códigos correctores.

Durante esta etapa también he participado activamente en la formación de doctores y postgraduados. He dirigido una tesis doctoral y he participado como docente (en muchos casos como director también) en 10 escuelas de postgrado y doctorado en diversos países (España, Venezuela, México, Colombia, Senegal, EEUU y Bélgica) subvencionadas por diversos organismos (UE Erasmus LP, CIMPA, ColCiencias, CIMAT, ...)

Finalmente también he realizado tareas editoriales siendo editor de dos volúmenes para la World-Scientific y uno para la AMS (Contemporary Mathematics). También he sido editor especial para las revistas Designs, Codes and Cryptography, Applicable Algebra in Engineering, Communication and Computing, Mathematics in Computer Science y Journal of Symbolic Computation y soy editor asociado para el Journal of Algebra Combinatorics Discrete Structures and Applications.



General quality indicators of scientific research

This section describes briefly the main quality indicators of scientific production (periods of research activity, experience in supervising doctoral theses, total citations, articles in journals of the first quartile, H index...). It also includes other important aspects or peculiarities.

Número de sexenios: 3 (Último concedido en julio de 2015)

Tesis dirigidas en los últimos 5 años:

- 1.- Irene Marquez Corbella "Combinatorial Commutative Algebra Approach to Complete Decoding". Universidad de Valladolid, Julio 2013. Calificación: Sobresaliente Cum Laude y premio extraordinario de doctorado.
- 2.- Alexandre Fotue "Galois Actions on Linear Codes" University of Yaunde I. Cameroon. Depositada.

Citas:

- **AMS-MathSciNet:** Total 85 citas
- **SCOPUS:** Total 108 citas. (Author ID: 22035537100)



Edgar Martínez Moro

Surname(s): **Martínez Moro**
 Name: **Edgar**
 DNI: **09333427G**
 ORCID: **0000-0003-1243-2049**
 ScopusID: **22035537100**
 ResearcherID: **K-7516-2014**
 Date of birth: **18/07/1972**
 Gender: **Male**
 Nationality: **Spain**
 Country of birth: **Spain**
 Aut. region/reg. of birth: **Castile and León**
 Contact province: **Valladolid**
 City of birth: **Valladolid**
 Contact address: **Instituto de Investigación en Matemáticas**
 Rest of contact address: **Universidad de Valladolid**
 Postcode: **47011**
 Contact country: **Spain**
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Current professional situation

Employing entity: Universidad de Valladolid
Department: Facultad de Educación y Trabajo Social
Professional category: Profesor Titular de **Educational Management (Yes/No):** No
 Universidad
City employing entity: Valladolid, Castile and León, Spain
Email: Edgar.Martinez@uva.es
Start date: 12/05/2008
Type of contract: Civil servant **Dedication regime:** Full time
Primary (UNESCO code): 120100 - Algebra; 120400 - Geometry
Secondary (UNESCO code): 120308 - Codes and coding systems
Identify key words: Communication and information: circuits; Computation and discrete mathematics;
 Algebraic combinatority

Previous positions and activities

	Employing entity	Professional category	Start date
1	Universidad de Valladolid	Profesor Titular de Escuela Universitaria	29/06/2000
2	Universidad de Valladolid	Ayudante de Escuela Universitaria	05/03/1996



- 1** **Employing entity:** Universidad de Valladolid **Type of entity:** University
Professional category: Profesor Titular de Escuela Universitaria
Start-End date: 29/06/2000 - 11/05/2008 **Duration:** 7 years - 10 months - 13 days
- 2** **Employing entity:** Universidad de Valladolid **Type of entity:** University
Professional category: Ayudante de Escuela Universitaria
Start-End date: 05/03/1996 - 28/06/2000 **Duration:** 4 years - 3 months - 23 days



Education

University education

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

University degree: Higher degree

Name of qualification: Licenciado en Ciencias Matemáticas Especialidad Matemática Pura Opción Álgebra y Geometría

Degree awarding entity: Universidad de Valladolid **Type of entity:** University

Date of qualification: 31/07/1995

Doctorates

Doctorate programme: Programa de Doctorado en Matemáticas

Degree awarding entity: Universidad de Valladolid **Type of entity:** University

Date of degree: 31/07/2001

Language skills

Language	Listening skills	Reading skills	Spoken interaction	Speaking skills	Writing skills
English		C1	C1	C1	C1

Teaching experience

Experience supervising doctoral thesis and/or final year projects

- Project title:** Combinatorial Commutative Algebra Approach to Complete Decoding
Co-director of thesis: Antonio Campillo López
Entity: Universidad de Valladolid **Type of entity:** University
Student: Irene Márquez Corbella
Obtained qualification: Sobresaliente (Cum Laude) Premio Extraordinario de Doctorado
Date of reading: 2013
European doctorate: Yes
Quality recognition: Yes
- Project title:** Presentaciones binomiales de programas lineales modulares: Aplicaciones a los códigos correctores de errores
Type of project: Work leading to an ASD
Entity: Universidad de Valladolid **Type of entity:** University
Student: Irene Márquez Corbella
Obtained qualification: 9,5



Date of reading: 01/07/2010

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:** Singularidades, valoraciones y álgebras graduadas, codificación.
Entity where project took place: Universidad de Valladolid **Type of entity:** University
City of entity: Valladolid,
Name principal investigator (PI, Co-PI....): Félix Delgado de la Mata
Funding entity or bodies:
Ministerio de Economía y Competitividad
Start-End date: 01/01/2016 - 31/12/2018
Total amount: 105.875 €
- 2** **Name of the project:** RANDOM NETWORK CODING AND DESIGNS OVER GF(q)
Geographical area: European Union
Entity where project took place: University College - Dublin
Name principal investigator (PI, Co-PI....): Marcus GREFERATH (University College-Dublin)
Funding entity or bodies:
UE
Name of the programme: COST (European Cooperation in Science and Technology)
Code according to the funding entity: COST IC1104
Start-End date: 01/03/2012 - 01/03/2016
Total amount: 2.000.000 €
- 3** **Name of the project:** GEOMETRÍA E INFORMACIÓN. PROBLEMAS DISCRETOS, ARITMÉTICOS Y NO CONMUTATIVOS.
Entity where project took place: Universidad de Valladolid
Name principal investigator (PI, Co-PI....): Antonio CAMPILLO LÓPEZ
Funding entity or bodies:
MICINN
Name of the programme: Planes Nacionales I+D/I+D+I
Start-End date: 01/01/2013 - 31/12/2015
- 4** **Name of the project:** ALGORITMOS CRIPTOGRÁFICOS CON CURVAS ELÍPTICAS Y CÓDIGOS CORRECTORES
Degree of contribution: Researcher
Entity where project took place: Universidad de Valladolid **Type of entity:** University
Name principal investigator (PI, Co-PI....): Juan Gabriel TENA AYUSO
Funding entity or bodies:
MICINN



Name of the programme: Planes Nacionales I+D/I+D+I
Code according to the funding entity: MTM2010-21580-C02-02
Start-End date: 01/01/2011 - 31/12/2013
Total amount: 45.375 €

5 Name of the project: GEOMETRÍA ALGEBRAICA DE LAS SINGULARIDADES, COMPUTACIÓN E INFORMACIÓN

Geographical area: National

Degree of contribution: Researcher

Entity where project took place: Universidad de Valladolid **Type of entity:** University

Name principal investigator (PI, Co-PI....): Antonio CAMPILLO LÓPEZ

Funding entity or bodies:

Ministerio de Educación, Política Social y Deporte **Type of entity:** State agency

Name of the programme: Planes Nacionales I+D/I+D+I

Code according to the funding entity: MTM2007-64704

Start-End date: 01/10/2007 - 03/08/2012

Total amount: 444.675 €

6 Name of the project: CONGRESO DE JÓVENES INVESTIGADORES RSME

Entity where project took place: Universidad de Valladolid

Name principal investigator (PI, Co-PI....): Edgar Martínez Moro

Funding entity or bodies:

Ministerio de Educación, Política Social y Deporte **Type of entity:** State agency

Name of the programme: Acciones Especiales/Complementarias

Code according to the funding entity: MTM2010-12104-E

Start-End date: 01/07/2011 - 31/12/2011

Total amount: 4.500 €

7 Name of the project: CRIPTOLOGÍA ELIPTICA DISTRIBUIDA Y APLICACIONES

Entity where project took place: Universidad de Valladolid **Type of entity:** University

Name principal investigator (PI, Co-PI....): Juan Gabriel TENA AYUSO

Funding entity or bodies:

Ministerio de Educación, Política Social y Deporte **Type of entity:** State agency

Name of the programme: Planes Nacionales I+D/I+D+I

Code according to the funding entity: MTM2007-66842

Start-End date: 01/10/2007 - 30/09/2010

Total amount: 36.300 €

8 Name of the project: APLICACIONES, COMBINATORIA Y COMPUTACIÓN EFECTIVA EN MONOIDES ADITIVOS.

Geographical area: Non EU International

Degree of contribution: Coordinator of total project, network or consortium

Entity where project took place: Universidad de Valladolid **Type of entity:** University

Name principal investigator (PI, Co-PI....): Edgar MARTINEZ MORO

Funding entity or bodies:

Agencia Española de Cooperación Internacional **Type of entity:** Body, others



Name of the programme: Programa de Cooperación Interuniversitaria e Investigación Científica entre España e Iberoamérica

Code according to the funding entity: A/016959/08

Start-End date: 06/01/2009 - 05/01/2010

Total amount: 7.260 €

9 Name of the project: GEOMETRÍA ALGEBRAICA COMPUTACIONAL Y TEORÍA DE LA INFORMACIÓN

Entity where project took place: Universidad de Valladolid **Type of entity:** University

Name principal investigator (PI, Co-PI....): Antonio CAMPILLO LÓPEZ

Funding entity or bodies:

Junta de Castilla y León

Type of entity: JCyL

City funding entity: Valladolid, Castile and León, Spain

Name of the programme: Convocatoria: Programa Gral. de Apoyo a Proyectos de Investigación

Code according to the funding entity: VA65A07

Start-End date: 05/07/2007 - 31/12/2009

Total amount: 15.000 €

10 Name of the project: S3CM: SORIA SUMMER SHOOOL ON COMPUTATIONAL MATHEMATICS

Entity where project took place: Universidad de Valladolid

Name principal investigator (PI, Co-PI....): Edgar Martínez Moro

Funding entity or bodies:

Ministerio de Educación, Política Social y Deporte

Type of entity: State agency

Name of the programme: Acciones Especiales/Complementarias

Code according to the funding entity: MTM2007-30859-E

Start-End date: 15/04/2008 - 31/12/2008

Total amount: 6.400 €

11 Name of the project: COMPUTACIÓN EFECTIVA DE LA ESTRUCTURA ADITIVA DE MONOIDES Y APLICACIONES

Degree of contribution: Coordinator of total project, network or consortium

Entity where project took place: Universidad de Valladolid **Type of entity:** University

Name principal investigator (PI, Co-PI....): Edgar MARTINEZ MORO

Funding entity or bodies:

Agencia Española de Cooperación Internacional

Type of entity: Body, others

Name of the programme: Programa de Cooperación Interuniversitaria e Investigación Científica entre España e Iberoamérica

Code according to the funding entity: A/7445/07

Start-End date: 15/01/2008 - 31/12/2008

Total amount: 4.900 €

12 Name of the project: SOLUCIONES DE ECUACIONES ALGEBRAICAS Y DIFERENCIALES

Geographical area: European Union

Entity where project took place: Universidad de Sevilla **Type of entity:** University

Name principal investigator (PI, Co-PI....): Luis NARVAEZ MACARRO

Funding entity or bodies:

: Ministerio de Educación y Ciencia

Name of the programme: Acciones Integradas



Code according to the funding entity: HU2005-0015
Start-End date: 01/03/2006 - 01/03/2008
Total amount: 11.250 €

13 Name of the project: CRIPTOGRAFÍA CON CURVAS ELÍPTICAS Y TARJETAS INTELIGENTES

Geographical area: National
Degree of contribution: Researcher
Entity where project took place: Universidad de Valladolid
Name principal investigator (PI, Co-PI....): Juan Gabriel TENA AYUSO
Funding entity or bodies:
 Ministerio de Educación y Ciencia

Name of the programme: Programa Nacional de Investigación MTM.Tipo Proy. Planes Nacionales I+D/I+D+I

Code according to the funding entity: MTM2004-00876
Start-End date: 13/12/2004 - 12/12/2007
Total amount: 26.220 €

14 Name of the project: GEOMETRÍA ALGEBRAICA DE LAS SINGULARIDADES, COMBINATORIA Y COMPUTACIÓN

Geographical area: National
Degree of contribution: Researcher
Entity where project took place: Universidad de Valladolid
Name principal investigator (PI, Co-PI....): Antonio CAMPILLO LÓPEZ
Funding entity or bodies:
 Ministerio de Educación y Ciencia

Name of the programme: Programa Nacional de Investigación MTM.Tipo Proy. Planes Nacionales I+D/I+D+I

Code according to the funding entity: MTM2004-00958
Start-End date: 13/12/2004 - 12/12/2007
Total amount: 197.300 €

15 Name of the project: V JORNADAS DE MATEMÁTICA DISCRETA Y ALGORÍTMICA

Entity where project took place: Universidad de Valladolid
Name principal investigator (PI, Co-PI....): Edgar Martínez Moro
Funding entity or bodies:
 Ministerio de Educación, Política Social y Deporte **Type of entity:** State agency

Name of the programme: Acciones Especiales/Complementarias

Code according to the funding entity: MTM2005-24549-E
Start-End date: 01/05/2006 - 31/12/2006
Total amount: 6.000 €

16 Name of the project: V JORNADAS DE MATEMATICA DISCRETA Y ALGORITMICA

Degree of contribution: Coordinator of total project, network or consortium
Entity where project took place: Universidad de Valladolid **Type of entity:** University

City of entity: Castile and León, Spain

Name principal investigator (PI, Co-PI....): Edgar Martínez Moro

Funding entity or bodies:
 Junta de Castilla y León **Type of entity:** Consejería de Educación
City funding entity: Valladolid, Castile and León, Spain



Name of the programme: Ayudas a realización de congresos

Start-End date: 01/01/2006 - 31/12/2006

Total amount: 5.092 €

17 Name of the project: SINGULARITIES: TOPOLOGY, ARITHMETICS AND COMPUTATION

Geographical area: UE

Degree of contribution: Researcher

Entity where project took place: Universidad de Valladolid

Name principal investigator (PI, Co-PI....): Antonio CAMPILLO LÓPEZ

Funding entity or bodies:

Unión Europea

Name of the programme: V Programa Marco

Code according to the funding entity: MCFH-2001-0165

Start-End date: 01/12/2001 - 01/12/2005

Total amount: 337.771,21 €

18 Name of the project: SINGULARIDADES Y COMBINATORIA. VALORACIONES, ARCOS, CODIFICACIÓN Y COMPUTACIÓN

Geographical area: National

Degree of contribution: Researcher

Entity where project took place: Universidad de Valladolid

Name principal investigator (PI, Co-PI....): Antonio CAMPILLO LÓPEZ

Funding entity or bodies:

MINISTERIO DE EDUCACION Y CIENCIA

Name of the programme: Programa Nacional de Investigación BFM.Planes Nacionales I+D/I+D+I

Code according to the funding entity: BFM2001-02251

Start-End date: 28/12/2001 - 27/06/2005

Total amount: 79.483,85 €

19 Name of the project: AUTENTIFICACIÓN DE USUARIOS EN DOCUMENTOS DE IDENTIDAD

Geographical area: Regional

Degree of contribution: Researcher

Entity where project took place: Universidad de Valladolid

Name principal investigator (PI, Co-PI....): Carlos MUNUERA GÓMEZ

Funding entity or bodies:

Junta de Castilla y León. Consejería de Educación y Cultura Tipo Proy.

Name of the programme: Programa Gral. de Apoyo a Proyectos de Investigación

Code according to the funding entity: VA020/02

Start-End date: 19/02/2002 - 20/11/2004

Total amount: 8.176 €

20 Name of the project: CRIPTOGRAFÍA CON CURVAS ELÍPTICAS: APLICACIÓN A TELECOMUNICACIONES MÓVILES

Geographical area: Regional

Degree of contribution: Researcher

Entity where project took place: Universidad de Valladolid

Name principal investigator (PI, Co-PI....): Juan Gabriel TENA AYUSO

Funding entity or bodies:

Junta de Castilla y León.



Name of the programme: Programa Gral. de Apoyo a Proyectos de Investigación
Code according to the funding entity: VA079/02
Start-End date: 19/02/2002 - 20/11/2004
Total amount: 15.085 €

21 Name of the project: CONSTRUCCIONES CRIPTOGRÁFICAS BASADAS EN CÓDIGOS CORRECTORES

Geographical area: Regional
Degree of contribution: Researcher
Entity where project took place: Universidad de Valladolid
Name principal investigator (PI, Co-PI....): Juan Gabriel TENA AYUSO
Funding entity or bodies:
Junta de Castilla y León. Consejería de Educación y Cultura Tipo Proy.

Name of the programme: Programa Gral. de Apoyo a Proyectos de Investigación (JCyL)
Code according to the funding entity: VA02/99
Start-End date: 01/01/1999 - 31/12/2001
Total amount: 23.923,29 €

22 Name of the project: CLASIFICACION DE SINGULARIDADES: IDEALES, ARCOS Y VALORACIONES

Geographical area: National
Degree of contribution: Researcher
Entity where project took place: Universidad de Valladolid
Name principal investigator (PI, Co-PI....): Antonio CAMPILLO LÓPEZ
Funding entity or bodies:
MINISTERIO DE EDUCACION Y CIENCIA

Name of the programme: Programa Nacional de Investigación PB. Planes Nacionales I+D/I+D+I
Code according to the funding entity: PB97-0471
Start-End date: 01/10/1998 - 01/10/2001
Total amount: 36.060,73 €

Scientific and technological activities

Scientific production

Publications, scientific and technical documents

- 1 Edgar Martinez-Moro; Kamil Otal; Ferruh Özbudak. Additive cyclic codes over finite commutative chain rings. *Discrete Mathematics*. 341 - 7, pp. 1873 - 1884. 2018. Available on-line at: <<https://www.sciencedirect.com/science/article/pii/S0012365X18300876>>. ISSN 0012-365X
Type of production: Scientific paper **Format:** Journal
- 2 E. Martínez-Moro; A. Píñera-Nicolás; I. F. Rúa. Codes over affine algebras with a finite commutative chain coefficient ring. *Finite Fields Appl.* 49, pp. 94 - 107. 2018. Available on-line at: <<https://doi.org/10.1016/j.ffa.2017.09.008>>. ISSN 1071-5797
Type of production: Scientific paper **Format:** Journal

- 3** E. Martínez-Moro; A. Piñera-Nicolás; I.F. Rúa. Multivariable codes in principal ideal polynomial quotient rings with applications to additive modular bivariate codes over F_4 . *Journal of Pure and Applied Algebra*. 2018. Available on-line at: <<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85018286773&doi=10.1016%2fj.jpaa.2017.04.007&partnerID=40&md5=acd4c309acf873719a46646cddb17913>>.
Type of production: Scientific paper **Format:** Journal
- 4** Irene Márquez Corbella; Edgar Martínez Moro; Emilio Suárez Canedo. On the ideal associated to a linear code. *Advances in Mathematics of Communications*. 10 - 2, pp. 229 - 254. AIMS, 02/05/2016. Available on-line at: <[doi:10.3934/amc.2016003](https://doi.org/10.3934/amc.2016003)>.
Type of production: Scientific paper **Format:** Journal
Impact source: ISI
- 5** Mijail Borges Quintana; M. Angel Borges Trenard; Irene Márquez Corbella; Edgar Martínez Moro. Computing coset leaders and leader codewords of binary codes. *Journal of Algebra and Its Applications*. 14 - 8, pp. 1 - 19. World Scientific, 01/07/2015. Available on-line at: <<http://dx.doi.org/10.1142/S0219498815501285>>.
Type of production: Scientific paper **Format:** Journal
- 6** Edgar Martínez Moro; Hakan Özadam; Ferruh Özbudak; Steve Szabo. On a class of repeated-root monomial-like abelian codes. *J. Algebra Comb. Discrete Appl.* 2 - 2, pp. 1 - 10. Yildiz University, 04/05/2015. ISSN 2148-838X
Type of production: Scientific paper **Format:** Journal
- 7** Edgar Martínez Moro; Steve Szabo; Bahattin Yildiz. Linear codes over $Z_4[x]/\langle x^2 + 2x \rangle$. *International Journal of Information and Coding Theory*. 3 - 1, pp. 78 - 96. InterScience, 31/03/2015. Available on-line at: <[10.1504/IJICOT.2015.068698](https://doi.org/10.1504/IJICOT.2015.068698)>.
Type of production: Scientific paper **Format:** Journal
- 8** Irene Márquez-Corbella; Edgar Martínez-Moro; G.R. Pellikaan; Diego Ruano. Computational aspects of retrieving a representation of an algebraic geometry code. *Journal of Symbolic Computation*. 64, pp. 67 - 87. Elsevier, 01/08/2014. Available on-line at: <<http://dx.doi.org/10.1016/j.jsc.2013.12.007>>.
Type of production: Scientific paper **Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 9** Edgar Martínez-Moro; Alejandro Piñera-Nicolás; Ignacio Fernández-Rua. On additive modular bivariate codes over F_4 . *Finite Fields and their Applications*. 28, pp. 199 - 213. Elsevier, 01/07/2014. Available on-line at: <<http://dx.doi.org/10.1016/j.ffa.2014.02.007>>.
Type of production: Scientific paper
- 10** Irene Márquez-Corbella; Edgar Martínez-Moro; Emilio Suárez-Canedo. On the Composition of Secret Sharing Schemes Related to Codes. *Discrete Mathematics, Algorithms and Applications*. 06 - 1, pp. 1 - 8. World Scientific, 01/03/2014. Available on-line at: <<http://www.worldscientific.com/doi/abs/10.1142/S179383091450013X>>.
Type of production: Scientific paper
- 11** Irene Márquez-Corbella; Edgar Martínez-Moro; Ruud Pellikaan. On the unique representation of very strong algebraic geometry codes. *Designs, Codes and Cryptography*. 70 - 1-2, pp. 215 - 230. Springer US, 01/01/2014. Available on-line at: <<http://dx.doi.org/10.1007/s10623-012-9758-3>>. ISSN 0925-1022
Type of production: Scientific paper **Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 12** E. Martínez-Moro; A. Piñera-Nicolás; I.F. Rúa. Additive semisimple multivariable codes over F_4 . *Designs, Codes and Cryptography*. 69, pp. 161 - 180. Springer US, 2013. Available on-line at: <<http://dx.doi.org/10.1007/s10623-012-9641-2>>. ISSN 0925-1022
Type of production: Scientific paper **Format:** Journal



Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

- 13** E. Martínez-Moro; A. P. Nicolás; I. F. Rúa. On trace codes and Galois invariance over finite commutative chain rings. *Finite Fields Appl.* 22, pp. 114 - 121. 2013. Available on-line at: <<http://dx.doi.org/10.1016/j.ffa.2013.03.004>>. ISSN 1071-5797
Type of production: Scientific paper **Format:** Journal
- 14** Irene Márquez-Corbella; Edgar Martínez-Moro; Ruud Pellikaan. The non-gap sequence of a subcode of a generalized Reed–Solomon code. *Designs, Codes and Cryptography.* 66 - 1-3, pp. 317 - 333. Springer US, 2013. Available on-line at: <<http://dx.doi.org/10.1007/s10623-012-9694-2>>. ISSN 0925-1022
Type of production: Scientific paper **Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 15** Irene Márquez-Corbella; Edgar Martínez-Moro. Decomposition of modular codes for computing test sets and Graver basis. *Math. Comput. Sci.* 6 - 2, pp. 147 - 165. Springer Verlag, 2012. Available on-line at: <<http://dx.doi.org/10.1007/s11786-012-0120-y>>. ISSN 1661-8270
Type of production: Scientific paper **Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 16** Irene Márquez-Corbella; Edgar Martínez-Moro. Algebraic structure of the minimal support codewords set of some linear codes. *Adv. Math. Commun.* 5 - 2, pp. 233 - 244. 2011. Available on-line at: <<http://dx.doi.org/10.3934/amc.2011.5.233>>. ISSN 1930-5346
Type of production: Scientific paper **Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 17** M. Borges-Quintana; M. A. Borges-Trenard; P. Fitzpatrick; E. Martínez-Moro. Gröbner bases and combinatorics for binary codes. *Appl. Algebra Engrg. Comm. Comput.* 19 - 5, pp. 393 - 411. 2008. Available on-line at: <<http://dx.doi.org/10.1007/s00200-008-0080-2>>. ISSN 0938-1279
Type of production: Scientific paper **Format:** Journal
- 18** M. Borges-Quintana; M. A. Borges-Trenard; E. Martínez-Moro. On a Gröbner bases structure associated to linear codes. *J. Discrete Math. Sci. Cryptogr.* 10 - 2, pp. 151 - 191. 2007. ISSN 0972-0529
Type of production: Scientific paper **Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 19** E. Martínez-Moro; I. F. Rúa. On repeated-root multivariable codes over a finite chain ring. *Des. Codes Cryptogr.* 45 - 2, pp. 219 - 227. 2007. Available on-line at: <<http://dx.doi.org/10.1007/s10623-007-9114-1>>. ISSN 0925-1022
Type of production: Scientific paper **Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 20** Edgar Martínez-Moro. On semisimple algebra codes: generator theory. *Algebra Discrete Math.* 3, pp. 99 - 112. 2007. ISSN 1726-3255
Type of production: Scientific paper **Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 21** E. Martínez-Moro; I. F. Rúa. Multivariable codes over finite chain rings: serial codes. *SIAM J. Discrete Math.* 20 - 4, pp. 947 - 959. 2006. Available on-line at: <<http://dx.doi.org/10.1137/050632208>>. ISSN 0895-4801
Type of production: Scientific paper **Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee



- 22** Miguel A. Borges-Trenard; Mijail Borges-Quintana; José A. Castellanos-Garzón; Edgar Martínez-Moro. The symmetric group given by a Gröbner basis. *J. Pure Appl. Algebra.* 207 - 1, pp. 149 - 154. 2006. Available on-line at: <http://dx.doi.org/10.1016/j.jpaa.2005.09.011>. ISSN 0022-4049
Type of production: Scientific paper **Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 23** Edgar Martínez-Moro. A generalization of Niederreiter-Xing's propagation rule and its commutativity with duality. *IEEE Trans. Inform. Theory.* 50 - 4, pp. 701 - 702. 2004. Available on-line at: <http://dx.doi.org/10.1109/TIT.2004.825036>. ISSN 0018-9448
Type of production: Scientific paper **Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 24** E. Martínez-Moro; J. Mozo-Fernández; C. Munuera. Compounding secret sharing schemes. *Australas. J. Combin.* 30, pp. 277 - 290. 2004. ISSN 1034-4942
Type of production: Scientific paper **Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 25** Edgar Martínez-Moro. Regular representations of finite-dimensional separable semisimple algebras and Gröbner bases. *J. Symbolic Comput.* 37 - 5, pp. 575 - 587. 2004. Available on-line at: <http://dx.doi.org/10.1016/j.jsc.2003.08.001>. ISSN 0747-7171
Type of production: Scientific paper **Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 26** Edgar Martínez-Moro; Roberto Canogar-Mckenzie. On the structure of multipliers of Z_2 . *Int. J. Math. Math. Sci.* 15, pp. 935 - 946. 2003. Available on-line at: <http://dx.doi.org/10.1155/S0161171203203124>. ISSN 0161-1712
Type of production: Scientific paper **Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 27** Edgar Martínez-Moro. Properties of commutative association schemes derived by FGLM techniques. *Internat. J. Algebra Comput.* 12 - 6, pp. 849 - 865. 2002. Available on-line at: <http://dx.doi.org/10.1142/S021819670200119X>. ISSN 0218-1967
Type of production: Scientific paper **Format:** Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 28** Mijail Borges-Quintana; Miguel A. Borges-Trenard; Edgar Martínez-Moro. Trial set and Gröbner bases for binary codes. 198, pp. 21 - 27. Springer, Cham, 2017.
Type of production: Book chapter **Format:** Book
- 29** Irene Márquez Corbella; Edgar Martínez Moro. A Semigroup Approach to Complete Decoding. *Contemporary Mathematics.* 642, pp. 41 - 72. American Mathematical Society, 01/07/2015. Available on-line at: <http://dx.doi.org/10.1090/conm/642>.
Type of production: Book chapter **Format:** Book
- 30** Edgar Martínez Moro; Steve Szabo. On Codes over Local Frobenius Non-Chain Rings of Order 16. *Contemporary Mathematics.* 634, pp. 227 - 241. American Mathematical Society, 01/06/2015. Available on-line at: <http://dx.doi.org/10.1090/conm/634/12702>.
Type of production: Book chapter **Format:** Book
- 31** Natalia Dück; Irene Márquez Corbella; Edgar Martínez Moro. On the Fan Associated to a Linear Code. *Coding Theory and Applications - CIM Series in Mathematical Sciences.* 3, pp. 61 - 68. Springer-Verlag, 2015.
Type of production: Book chapter **Format:** Book



- 32** M. Borges-Quintana; M.A. Borges-Trenard; E. Martínez-Moro. An Application of Möller's Algorithm to Coding Theory. Gröbner Bases, Coding, and Cryptography. pp. 379 - 384. Springer Berlin Heidelberg, 2009. Available on-line at: <http://dx.doi.org/10.1007/978-3-540-93806-4_24>. ISBN 978-3-540-93805-7
Type of production: Book chapter **Format:** Book
Degree of contribution: Author or co-author of chapter in book
- 33** Edgar Martínez-Moro; Diego Ruano. Mattson Solomon Transform and Algebra Codes. Gröbner Bases, Coding, and Cryptography. pp. 385 - 388. Springer Berlin Heidelberg, 2009. Available on-line at: <http://dx.doi.org/10.1007/978-3-540-93806-4_25>. ISBN 978-3-540-93805-7
Type of production: Book chapter **Format:** Book
Degree of contribution: Author or co-author of chapter in book
- 34** M. B. Quintana; M. B. Trenard; C. García-González; E. Martínez. The partial order associated with the equivalence classes of a binary code. Sixth Conference on Discrete Mathematics and Computer Science. pp. 509 - 516. Univ. Lleida, Lleida, 2008.
Type of production: Book chapter **Format:** Book
Degree of contribution: Author or co-author of chapter in book
- 35** Edgar Martínez-Moro; Diego Ruano. Toric codes. Series on Coding Theory and Cryptology: Advances in Algebraic Geometry Codes. 5, pp. 295 - 322. World Sci. Publ., Hackensack, NJ, 2008. Available on-line at: <http://dx.doi.org/10.1142/9789812794017_0008>.
Type of production: Book chapter **Format:** Book
Degree of contribution: Author or co-author of chapter in book
- 36** M. Borges-Quintana; M. A. Borges-Trenard; E. Martínez-Moro. A Gröbner representation for linear codes. Series on Coding Theory and Cryptology: Advances in Coding Theory and Cryptography. 3, pp. 17 - 32. World Sci. Publ., Hackensack, NJ, 2007. Available on-line at: <http://dx.doi.org/10.1142/9789812772022_0002>.
Type of production: Book chapter **Format:** Book
Degree of contribution: Author or co-author of chapter in book
- 37** M. Borges-Quintana; M. A. Borges-Trenard; E. Martínez-Moro. A general framework for applying FGLM techniques to linear codes. Lecture Notes in Computer Science. 3857, pp. 76 - 86. Springer, 2006. Available on-line at: <http://dx.doi.org/10.1007/11617983_7>.
Type of production: Book chapter **Format:** Book
Degree of contribution: Author or co-author of chapter in book
- 38** M. Borges-Quintana; M. A. Borges-Trenard; P. Fitzpatrick; E. Martínez-Moro. Cycles, ideals and binary codes. Fifth Conference on Discrete Mathematics and Computer Science. 23, pp. 179 - 186. Univ. Valladolid, 2006.
Type of production: Book chapter **Format:** Book
Degree of contribution: Author or co-author of chapter in book
- 39** M. Borges-Quintana; M. A. Borges-Trenard; E. Martínez-Moro. On the use of Gröbner bases for computing the structure of finite abelian groups. Lecture Notes in Computer Science. 3718, pp. 52 - 64. Springer, 2005. Available on-line at: <http://dx.doi.org/10.1007/11555964_5>.
Type of production: Book chapter **Format:** Book
Degree of contribution: Author or co-author of chapter in book
- 40** F. Javier Galán-Simón; Edgar Martínez-Moro; Juan G. Tena-Ayuso. Majority-logic-decodable cyclic arithmetic-modular $\{AN\}$ -codes in 1, 2, and $\{\mathbb{L}\}$ steps. Lecture Notes in Computer Science. 2260, pp. 128 - 137. Springer, 2001. Available on-line at: <http://dx.doi.org/10.1007/3-540-45325-3_12>.
Type of production: Book chapter **Format:** Book
Degree of contribution: Author or co-author of chapter in book

- 41** Edgar Martínez-Moro; F. Javier Galán-Simón; Miguel A. Borges-Trenard; Mijail Borges-Quintana. Combinatorial structure of finite fields with two dimensional modulo metrics. Lecture Notes in Computer Science. 1746, pp. 45 - 55. Springer, 1999. Available on-line at: <http://dx.doi.org/10.1007/3-540-46665-7_4>.
Type of production: Book chapter **Format:** Book
Degree of contribution: Author or co-author of chapter in book
- 42** Edgar Martínez-Moro. Computations on character tables of association schemes. Computer algebra in scientific computing—CASC'99. pp. 293 - 307. Springer, 1999.
Type of production: Book chapter **Format:** Book
Degree of contribution: Author or co-author of chapter in book
- 43** Ilias Kotsireas; Edgar Martínez Moro. Applications of Computer Algebra. Applications of Computer Algebra -- Kalamata, Greece, July 20–23 2015. Springer Verlag, 17/08/2017.
Type of production: Scientific book or monograph **Format:** Book
Degree of contribution: Editor or co-editor
- 44** Mustapha Lahyane; Edgar Martínez Moro. Algebra for Secure and Reliable Communication Modeling. Contemporary Mathematics. 642, American Mathematical Society, 01/07/2015. Available on-line at: <<http://dx.doi.org/10.1090/conm/642>>.
Type of production: Scientific book or monograph **Format:** Book
Degree of contribution: Editor or co-editor
- 45** Edgar Martínez Moro. Algebraic Geometry Modeling in Information Theory. Series on Coding Theory and Cryptology vol. 8. 8, pp. viii+325. World Scientific Publishing Co. Pte. Ltd., Hackensack, NJ, 2013. Available on-line at: <<http://www.worldscientific.com/worldscibooks/10.1142/8049>>. ISBN 978-981-4335-75-1
Type of production: Scientific book or monograph **Format:** Book
Degree of contribution: Editor or co-editor
- 46** Irene Márquez Corbella; Edgar Martínez Moro. An Introduction to LDPC Codes. Series on Coding Theory and Cryptology vol. 8. 8, pp. 129 - 166. World Scientific Publishing Co. Pte. Ltd., Hackensack, NJ, 2013. Available on-line at: <<http://www.worldscientific.com/worldscibooks/10.1142/8049>>. ISBN 978-981-4335-75-1
Type of production: Scientific book or monograph **Format:** Book
Degree of contribution: Author or co-author of chapter in book
- 47** IliasS. Kotsireas; Irene Márquez-Corbella; Edgar Martínez-Moro. Matroids in coding theory and related topics. Mathematics in Computer Science. 6 - 2, pp. 107 - 198. SP Birkhäuser Verlag Basel, 2012. Available on-line at: <<http://dx.doi.org/10.1007/s11786-012-0116-7>>. ISSN 1661-8270
Type of production: Scientific book or monograph **Format:** Journal
Degree of contribution: Editor or co-editor
- 48** Antonio Campillo; Edgar Martínez-Moro; Patrick Fitzpatrick; Ruud Pellikaan. Algebraic Coding Theory and Applications. J. Symbolic Comput.45 - 7, pp. 723 - 824. 2010. Available on-line at: <<http://www.sciencedirect.com/science/journal/07477171/45/7>>. ISSN 0747-7171
Type of production: Scientific book or monograph **Format:** Journal
Degree of contribution: Editor or co-editor
- 49** Edgar Martínez Moro; Carlos Munuera; Diego Ruano. Advances in algebraic geometry codes. Series on Coding Theory and Cryptology vol.5. 5, pp. viii+444 - viii+444. World Scientific Publishing Co. Pte. Ltd., Hackensack, NJ, 2008. Available on-line at: <<http://dx.doi.org/10.1142/9789812794017>>. ISBN 981-279-400-X
Type of production: Scientific book or monograph **Format:** Book
Degree of contribution: Editor or co-editor



- 50** Edgar Martínez Moro; Carlos Munuera Gómez; Diego Ruano Benito. Bases de Gröbner: aplicaciones a la codificación algebraica. pp. 125. Instituto Venezolano de Investigaciones Científicas, 09/2007. ISBN 978-980-261-087-7
Type of production: Scientific book or monograph **Format:** Book
Degree of contribution: Author or co-author of entire book
- 51** E. Martínez-Moro. V Jornadas de Matemática Discreta y Algorítmica. Fifth Conference on Discrete Mathematics and Computer Science. 23, pp. 445. Univ. Valladolid, 2006. ISBN 84-8448-380-0
Type of production: Scientific book or monograph **Format:** Book
Degree of contribution: Editor or co-editor

Works submitted to national or international conferences

- 1** **Title of the work:** Retrieving a Representation of an Algebraic Geometry Code
Name of the conference: 3rd Int. Conf. on Symbolic Computation and Cryptography
Geographical area: Non EU International
Type of participation: Participatory - oral communication
City of event: Castro Urdiales,
Date of event: 11/07/2012
Organising entity: Centre for Mathematical meetings
With external admission assessment committee: Yes
Irene Márquez; Edgar Martínez; Ruud Pellikaan; Diego Ruano.
- 2** **Title of the work:** Groebner presentations of linear and additive codes
Name of the conference: ACA 2012 18th International Conference on Applications of Computer Algebra
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Sofia, Bulgaria
Date of event: 25/06/2012
With external admission assessment committee: Yes
Irene Márquez Corbellá; Edgar Martínez Moro; E. MARTINEZ MORO.
- 3** **Title of the work:** Structural attacks against code-based cryptosystems
Name of the conference: First International IMAC Workshop on Algebraic Applications to Information Theory
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Castellón,
Date of event: 17/04/2012
Organising entity: Institut Universitari de Matemàtiques i Aplicacions de Castelló
Irene Márquez Corbella; Edgar Martínez Moro.
- 4** **Title of the work:** Combinatorics of minimal codewords of binary codes
Name of the conference: ALGEBRAIC COMBINATORICS AND APPLICATIONS (ALCOMA10) Lugar Thurnau
Date of event: 11/04/2011
I. MÁRQUEZ CORBELLA; E. MARTINEZ MORO.



- 5** **Title of the work:** The non-gap sequence of a subcode of a generalized Reed-Solomon code
Name of the conference: Seventh International Workshop on Coding and Cryptography 2011 Ciudad París
Date of event: 11/04/2011
I. MÁRQUEZ CORBELLA; E. MARTINEZ MORO; R. PELLIKAAN.
- 6** **Title of the work:** An Algebraic View to Gradient Descent Decoding
Name of the conference: Information Theory Workshop Ciudad Dublin
Date of event: 02/09/2010
M. BORGES QUINTANA; M.A. BORGES TRENARD; I. MÁRQUEZ CORBELLA; E. MARTINEZ MORO.
- 7** **Title of the work:** Descodificación por gradiente como reducción
Name of the conference: XII Encuentro de Álgebra Computacional y Aplicaciones Lugar Santiago de Compostela
Date of event: 19/07/2010
M. BORGES QUINTANA; M.A. BORGES TRENARD; I. MÁRQUEZ CORBELLA; E. MARTINEZ MORO.
- 8** **Title of the work:** The relationship between GDD algorithms and the Gröbner presentation of a code
Name of the conference: Soria Summer School on Computational Mathematics Lugar Soria
Date of event: 12/07/2010
M. BORGES QUINTANA; M.A. BORGES TRENARD; I. MÁRQUEZ CORBELLA; E. MARTINEZ MORO.
- 9** **Title of the work:** Programación lineal modular y bases de Graver: cálculo de soportes minimales de códigos lineales
Name of the conference: VII Jornadas de Matemática Discreta y Algorítmica Lugar Castro Urdiales
Date of event: 09/07/2010
I. MÁRQUEZ CORBELLA; E. MARTINEZ MORO.
- 10** **Title of the work:** Algebraic description of modular integer programming: Applications to coding theory
Name of the conference: The Claude Shannon Institute Workshop on Coding & Cryptography 2010 Lugar Cork
Date of event: 17/05/2010
I. MÁRQUEZ CORBELLA; E. MARTINEZ MORO.
- 11** **Title of the work:** Some results on multiple-root n-dimensional cyclic codes
Name of the conference: The Claude Shannon Institute Workshop on Coding & Cryptography 2010 Lugar Cork
Date of event: 17/05/2010
E. MARTINEZ MORO; H.OZADAM; F. OZBUDAK; S. SZABO.
- 12** **Title of the work:** El orden parcial asociado a las clase de equivalencia de un código binario
Name of the conference: VI Jornadas de Matemática Discreta y Algorítmica Lugar Lérida
Date of event: 21/07/2008
M. BORGES QUINTANA; M.A. BORGES TRENARD; C. GARCÍA; E. MARTINEZ MORO.
- 13** **Title of the work:** On a set of minimal codewords of binary code: an application to steganography
Name of the conference: The Claude Shannon Workshop on Coding & Cryptography
Type of event: Conference
Type of participation: Participatory - invited/keynote **Reasons for participation:** Upon invitation talk
City of event: Cork, Ireland
Date of event: 22/05/2007



Organising entity: Claude Shannon Institute for Discrete Mathematics, Coding, Cryptography and Information Security

With external admission assessment committee: Yes
MARTINEZ MORO, EDGAR.

14 Title of the work: Mattson-Solomon transform and Groebner bases: applications to association schemes and codes

Name of the conference: Gröbner Bases in Cryptography, Coding Theory, and Algebraic Combinatorics

Type of event: Conference

Type of participation: Participatory - invited/keynote **Reasons for participation:** Upon invitation talk

City of event: Linz, Austria

Date of event: 06/05/2006

Organising entity: Johannes Kepler Universität

With external admission assessment committee: Yes
Edgar Martínez Moro.

15 Title of the work: Groebner basis associated to linear codes: The binary case.

Name of the conference: The 10th International Conference on Applications of Computer Algebra Ciudad Beaumont, Texas Pais: Estados Unidos

Date of event: 21/07/2004

E. MARTINEZ MORO.

16 Title of the work: Another public key cryptosystem arising from error correcting codes

Name of the conference: Workshop on Coding & Cryptography

Type of event: Conference

Type of participation: Participatory - invited/keynote **Reasons for participation:** Upon invitation talk

City of event: Cork, Ireland

Date of event: 20/05/2004

Organising entity: Boole Center for Theoretical Informatics

With external admission assessment committee: Yes
MARTINEZ MORO, EDGAR.

17 Title of the work: Using Gröbner basis for determining the equivalence of linear codes

Name of the conference: International Conference on Applications of Computer Algebra 2003

City of event: Raleigh, North Caroline, United States of America

Date of event: 23/07/2003

E. MARTINEZ MORO.

18 Title of the work: Gröbner bases and association schemes: Some applications

Name of the conference: 2nd. Irish Conference on Foundations of Computer Science and Technology

Type of event: Conference

Type of participation: Participatory - invited/keynote **Reasons for participation:** Upon invitation talk

City of event: Galway, Ireland

Date of event: 19/07/2002

Organising entity: NUI Galway

With external admission assessment committee: Yes
MARTINEZ MORO, EDGAR.



Other dissemination activities

- 1** **Title of the work:** AN OVERVIEW OF CONECTIONS BETWEEN CODING AND CRYPTOGRAPHY THROUGH CASE STUDIES
Name of the event: ASRECOM: Algebra for Secure and REliable COmmunication Modeling
Type of event: Impartición de minicurso doctoral-postdoctoral de 8 horas
City of event: Morelia, Mexico
Date of event: 01/10/2012
Organising entity: Centre International de Mathématiques Pures et Appliquées
Irene Márquez Corbella; Edgar Martínez Moro.
- 2** **Title of the work:** McEliece-like cryptosystems
Name of the event: Noveno Coloquio Nacional de Teoría de Códigos, Criptografía y Áreas Relacionadas
Type of event: Impartición de minicurso doctoral-postdoctoral de 8 horas
Geographical area: Non EU International
Reasons for participation: Upon invitation
City of event: México D.F., Mexico
Date of event: 26/09/2011
Organising entity: Universidad Autónoma Metropolitana
With external admission assessment committee: Yes
Edgar Martínez Moro.
- 3** **Title of the work:** A case study of the combinatorics of linear codes with SAGE
Name of the event: ACAGM Summer School
Type of event: Impartición de curso doctora-postdoctoral de 10 horas
Geographical area: European Union
Reasons for participation: Upon invitation
City of event: Leuven,
Date of event: 10/07/2011
Organising entity: Katholieke Universiteit Leuven
Irene Márquez Corbellá; Edgar Martínez Moro. Available on-line at:
<<https://wis.kuleuven.be/events/acagm2011>>.
- 4** **Title of the work:** Introduction to algebraic geometry codes
Name of the event: International School and Conference on Coding Theory
Type of event: Impartición de minicurso doctoral-postdoctoral de 7 horas
Reasons for participation: Upon invitation
City of event: Guanajuato,
Date of event: 28/11/2008
Organising entity: Centro de Investigación en Matemáticas A.C.
With external admission assessment committee: Yes
Edgar Martínez Moro.
- 5** **Title of the work:** Gröbner basis and algebraic coding theory
Name of the event: S3CM: SORIA SUMMER SCHOOL ON COMPUTATIONAL MATHEMATICS "ALGEBRAIC CODING THEORY"
Type of event: Impartición de minicurso doctoral-postdoctoral de 8 horas
City of event: Soria,
Date of event: 02/07/2008



Organising entity: Universidad de Valladolid
Edgar Martínez Moro.

Type of entity: University

- 6 Title of the work:** Bases de Gröbner: aplicaciones a la codificación algebraica
Name of the event: XX Escuela Venezolana de Matemáticas
Type of event: Impartición de minicurso doctoral-postdoctoral de 20 horas
City of event: Mérida, Venezuela
Date of event: 02/09/2007
Organising entity: Asociación Matemática Venezolana
 Edgar Martínez Moro.

R&D management and participation in scientific committees

Organization of R&D activities

Title of the activity: Applications of Computer Algebra 2015
Type of activity: Congreso **Geographical area:** European Union
City of event: Kalamata, Greece
Convening entity: ACA WG
City convening entity: Greece
Type of participation: Presidente del Comité Científico
Nº assistants: 150
Start-End date: 20/07/2015 - 23/07/2015

R&D management

- 1 Name of the activity:** Congreso de Jóvenes Investigadores RSME
Performed tasks: Presidente del Comité Organizador
Entity: Universidad de Valladolid **Type of entity:** University
Start date: 05/09/2011 **Duration:** 4 days
Average annual budget: 30.000 **Nº of people:** 150
- 2 Name of the activity:** Soria Summer School on Computational Mathematics: Applied Computational Algebraic Geometric Modelling (ACAGM)
Type of management: Management of organised events
Performed tasks: Presidente del Comité Organizador
Entity: Universidad de Valladolid **Type of entity:** University
Start date: 07/2009 **Duration:** 12 days
Average annual budget: 38.200 **Nº of people:** 40
- 3 Name of the activity:** Soria Summer School on Computational Mathematics: Algebraic Coding Theory
Type of management: Management of organised events
Performed tasks: Presidente del Comité Organizador
Entity: Universidad de Valladolid **Type of entity:** University
Start date: 07/2008 **Duration:** 11 days
Average annual budget: 17.700 **Nº of people:** 40



- 4** **Name of the activity:** V Jornadas de Matemática Discreta y Algorítmica
Type of management: Management of organised events
Performed tasks: Presidente del Comité Organizador
Entity: Universidad de Valladolid **Type of entity:** University
Start date: 07/2006
Nº of people: 100

Evaluation and revision of R&D projects and articles

- 1** **Performed tasks:** Evaluador de proyectos MTM
Entity where activity was carried out: Agencia Nacional de Evaluación y Prospectiva
Start-End date: 01/09/2015 - 01/12/2015
- 2** **Name of the activity:** NSA-AMS NSA Mathematical Sciences Grants Program 2010
Performed tasks: Evaluador de Proyectos I+D+i
Entity where activity was carried out: National Security Agency and American Mathematical Societ
City of entity: United States of America
Type of activity: Evaluador de proyectos I+D+i **Frequency of the activity:** 1
Geographical area: Non EU International
Start date: 2010
- 3** **Performed tasks:** Revisor
Entity where activity was carried out: SIAM Journal on Computing
Frequency of the activity: 1
- 4** **Performed tasks:** Revisor
Entity where activity was carried out: Advances of Mathematics in Communications
Type of activity: Review of articles in scientific or technological journals **Frequency of the activity:** 1
- 5** **Performed tasks:** Revisor
Entity where activity was carried out: Applicable Algebra in Engineering, Communication and Computing
Type of activity: Review of articles in scientific or technological journals **Frequency of the activity:** 1
- 6** **Performed tasks:** Revisor
Entity where activity was carried out: Communications in Algebra
Type of activity: Review of articles in scientific or technological journals **Frequency of the activity:** 1
- 7** **Performed tasks:** Revisor
Entity where activity was carried out: Discrete Mathematics
Type of activity: Review of articles in scientific or technological journals **Frequency of the activity:** 1
- 8** **Performed tasks:** Revisor
Entity where activity was carried out: Finite Fields and their Applications
Type of activity: Review of articles in scientific or technological journals **Frequency of the activity:** 1



- 9 Performed tasks:** Revisor
Entity where activity was carried out: IEE Trans. Communications
Type of activity: Review of articles in scientific or technological journals
Frequency of the activity: 1
- 10 Performed tasks:** Revisor
Entity where activity was carried out: Journal of Discrete Algorithms
Type of activity: Review of articles in scientific or technological journals
Frequency of the activity: 1
- 11 Performed tasks:** Revisor
Entity where activity was carried out: Journal of Symbolic Computation
Type of activity: Review of articles in scientific or technological journals
Frequency of the activity: 1
- 12 Performed tasks:** Revisor
Entity where activity was carried out: American Mathematical Society Reviews
Type of activity: Review of articles in scientific or technological journals
Frequency of the activity: 14
- 13 Performed tasks:** Revisor
Entity where activity was carried out: Designs, Codes and Cryptography
Type of activity: Review of articles in scientific or technological journals
Frequency of the activity: 3
- 14 Performed tasks:** Revisor
Entity where activity was carried out: Zentralblatt MATH
Type of activity: Review of articles in scientific or technological journals

Other achievements

Stays in public or private R&D centres

- 1 Entity:** Eastern Kentucky University
Type of entity: University
Faculty, institute or centre: Department of Mathematics and Statistics
City of entity: Richmond, KY, United States of America
Start-End date: 28/01/2013 - 28/05/2013
Funding entity: Vernon Wilson Trust, Eastern Kentucky University
Goals of the stay: Contracted
Provable tasks: Vernon Wilson endowed Chair
- 2 Entity:** Centre National de la Recherche Scientifique
Faculty, institute or centre: Laboratoire I3S (Informatique, signaux et systèmes)
City of entity: Sophia Antipolis, France
Start date: 08/2006
Duration: 15 days
Funding entity: Vicerrectorado de Investigación, Universidad de Valladolid
Goals of the stay: Guest



- 3** **Entity:** University College Cork **Type of entity:** University
Faculty, institute or centre: Boole Centre for Research in Informatics
City of entity: Cork, Ireland
Start date: 05/2004 **Duration:** 28 days
Funding entity: Boole Centre for Research in Informatics
Goals of the stay: Guest
- 4** **Entity:** University College Cork
City of entity: Cork, Ireland
Start date: 06/2002 **Duration:** 42 days
Funding entity: Vicerrectorado de Investigación, Universidad de Valladolid
Goals of the stay: Guest
- 5** **Entity:** Universidad de Oriente
City of entity: Santiago de Cuba, Cuba
Start date: 09/2001 **Duration:** 15 days
Funding entity: Agencia Española de Cooperación Internacional **Type of entity:** Otros
Goals of the stay: Guest

Scientific societies and professional associations

- 1** **Name of the society:** International Asociation for Cryptologic Research (IACR)
Start-End date: 01/01/1997 - 31/12/1999
- 2** **Name of the society:** American Mathematical Society
Start date: 01/01/2013
- 3** **Name of the society:** Society for Industrial and Applied Mathematics
Start date: 01/01/2012
- 4** **Name of the society:** Real Sociedad Matemática Española
Professional category: Miembro de la Junta de Gobierno (2011- actualidad) y Presidente de la Comisión profesional (2011-actualidad)
Start date: 01/01/2002

Editorial councils

- 1** **Name of the editorial council:** Boletín sociedad Puig Adam de profesores de matemáticas
Affiliation entity: Universidades Complutense de Madrid
Start date: 01/01/2017
- 2** **Name of the editorial council:** Mathematics in Computer Science
Affiliation entity: Springer-Verlag
Start date: 01/01/2017



- 3** **Name of the editorial council:** Journal of Algebra Combinatorics Discrete Structures and Applications
Tasks carried out: Associate Editor
Start date: 01/08/2014

Periods of research activity

Nº of recognized periods: 3

Certifying entity: Agencia Nacional de Evaluación de la Calidad y Acreditación

Type of entity: ANECA

Date of recognition: 17/06/2015

Summary of other achievements

- 1** **Description of the achievement:** Presidente del comité científico del "Applications of Computer Algebra 2015"
Conferral date: 2015
- 2** **Description of the achievement:** Miembro del comité científico del "Workshop on the Arithmetic of Finite Fields WAIFI 2012"
Conferral date: 2012
- 3** **Description of the achievement:** Miembro del comité científico del "MACIS 2011: Fourth International Conference on Mathematical Aspects of Computer and Information Sciences", Pekín
Conferral date: 2011
- 4** **Description of the achievement:** Miembro del comité científico del "Third International Castle Meeting on Coding Theory and Applications", Cardona, Barcelona
Conferral date: 2011