



**Juan Carlos Marrero
González**

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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.

Six-year research periods: 6

Supervision of doctoral theses: 6

Total number of citations: Google Scholar: 4466 / Web of Science de Thomson Reuters: 2000 **Number of papers in Q1 (JCR, 2023):** 50

Average of citations per item: Web of Science de Thomson Reuters: 16.79

h-index: : Google Scholar: 36/ Web of Science de Thomson Reuters: 24.

Juan Carlos Marrero González

Surname(s): **Marrero González**
Name: **Juan Carlos**
DNI: **42089884E**
ORCID: **0000-0003-3341-515X**
ScopusID: **56188154100**
ResearcherID: **AAE-5744-2019**
Date of birth: **31/07/1965**
Gender: **Male**
Nationality: **Spain**
Country of birth: **Spain**
Aut. region/reg. of birth: **Canary Islands**
Contact province: **Santa Cruz de Tenerife**
City of birth: **Arico, La Sabinita, n 6**
Contact address: **C Astrofisico Fco Sánchez, s/n**
Postcode: **38071**
Contact country: **Spain**
Contact aut. region/reg.: **Canary Islands**
Contact city: **La Laguna**
Land line phone: **922318163**
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Email: **jcmarrer@ull.edu.es**
Mobile phone: **652945831**
Personal web page: **<http://jcmarrer.webs.ull.es/>**

Current professional situation

Employing entity: University of La Laguna

Professional category: Full Professor

Start date: 17/08/1998

Type of contract: Civil servant

Dedication regime: Full time

Previous positions and activities

	Employing entity	Professional category	Start date
1	University of La Laguna	Associate professor	06/02/1993
2	University of La Laguna	Profesor Titular Interino de Universidad	27/03/1992
3	University of La Laguna	Assistant Professor	01/10/1990
4	Universidad de La Laguna	Profesor Asociado a tiempo completo	01/05/1990
5	University of La Laguna	FPI Fellow	01/01/1988

1 **Employing entity:** University of La Laguna

Professional category: Associate professor

Start-End date: 06/02/1993 - 16/08/1998



- 2** **Employing entity:** University of La Laguna
Professional category: Profesor Titular Interino de Universidad
Start-End date: 27/03/1992 - 05/02/1993
- 3** **Employing entity:** University of La Laguna
Professional category: Assistant Professor
Start-End date: 01/10/1990 - 26/03/1992
- 4** **Employing entity:** Universidad de La Laguna
Professional category: Profesor Asociado a tiempo completo
Start-End date: 01/05/1990 - 30/09/1990
- 5** **Employing entity:** University of La Laguna
Professional category: FPI Fellow
Start-End date: 01/01/1988 - 30/04/1990



Education

University education

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

University degree: Higher degree

Name of qualification: Graduate in Mathematics, specialization in Fundamental Mathematics

Degree awarding entity: University of La Laguna

Date of qualification: 1987

Doctorates

Doctorate programme: PhD in Mathematics

Degree awarding entity: University of La Laguna

Date of degree: 05/04/1990

Language skills

Language	Listening skills	Reading skills	Spoken interaction	Speaking skills	Writing skills
French		C1	A1	A1	A1
English		C1	C1	C1	C1

Teaching experience

Experience supervising doctoral thesis and/or final year projects

- Project title:** TEOREMA DE MALUS-DUPIN Y GEOMETRIA SIMPLECTICA
Type of project: Trabajo fin de grado
Entity: University of La Laguna
City of entity: La Laguna, Canary Islands, Spain
Student: Carla Benítez García
Date of reading: 30/05/2023
- Project title:** ESTUDIO GEOMETRICO DE LA ECUACION DE HAMILTON-JACOBI
Type of project: Trabajo fin de grado
Entity: University of La Laguna
City of entity: La Laguna, Canary Islands, Spain
Student: Samuel Quintero Gonzalez
Date of reading: 14/07/2022



- 3** **Project title:** GEOMETRIC AND NUMERICAL ANALYSIS OF NONHOLONOMIC SYSTEMS
Type of project: Doctoral thesis
Co-director of thesis: David Martín de Diego
Entity: ICMAT, Universidad Autónoma de Madrid
City of entity: Madrid, Spain
Student: Alexander Anahory Simoes
Date of reading: 26/11/2021
- 4** **Project title:** ESPACIOS RECUBRIDORES
Type of project: Trabajo fin de grado
Entity: University of La Laguna
City of entity: La Laguna, Canary Islands, Spain
Student: Karim Omar Jérez Santana
Date of reading: 2020
- 5** **Project title:** LA GEOMETRIA DEL INDICADOR SUR
Type of project: Trabajo fin de grado
Entity: University of La Laguna
City of entity: La Laguna, Canary Islands, Spain
Student: Sara Santana Romero
Date of reading: 2019
- 6** **Project title:** MARSDEN-WEINSTEIN REDUCTION
Type of project: Master's Thesis
Entity: University of the Basque Country
City of entity: Bilbao, Basque Country, Spain
Student: Leonardo Galleguillos Sagredo
Date of reading: 26/09/2017
- 7** **Project title:** DIFFERENTIAL GEOMETRY IN THE STUDY OF MEDICAL IMAGES
Type of project: Trabajo fin de grado
Entity: University of La Laguna
City of entity: La Laguna, Canary Islands, Spain
Student: Clara Rodríguez Pérez
Date of reading: 2017
- 8** **Project title:** SYMPLECTIC PRINCIPAL R-BUNDLES AND APPLICATIONS TO NON-AUTONOMOUS HAMILTONIAN SYSTEMS
Type of project: Doctoral thesis
Co-director of thesis: Anna Maria Pastore
Entity: Università degli studi di Bari, University of La Laguna
City of entity: Bari, Italy
Student: Ignazio Lacirasella
Date of reading: 31/05/2013
- 9** **Project title:** SYMPLECTIC REDUCTION
Type of project: Supervised work
Entity: University of La Laguna
City of entity: La Laguna, Canary Islands, Spain
Student: Victor Manuel Jiménez Morales
Date of reading: 2013



- 10 Project title:** LAGRANGIAN LIE SUBALGEBROIDS OF THE CANONICAL SYMPLECTIC LIE ALGEBROID
Type of project: Master's Thesis
Co-director of thesis: Narciso Román Roy
Entity: Polytechnic University of Catalonia
City of entity: Barcelona, Catalonia, Spain
Student: Mònica Aymerich Valls
Date of reading: 13/07/2011
- 11 Project title:** ON TULCZYJEV TRIPLES FOR TIME-DEPENDENT MECHANICS
Type of project: Master's Thesis
Entity: University of La Laguna
City of entity: La Laguna, Canary Islands, Spain
Student: Elisa Lavinia Guzmán Alonso
Date of reading: 02/07/2010
- 12 Project title:** LIE-POISSON REDUCTION
Type of project: Supervised work
Entity: University of La Laguna
City of entity: La Laguna, Canary Islands, Spain
Student: Mònica Aymerich Valls
Date of reading: 2010
- 13 Project title:** GEOMETRIC MECHANICS AND LIE AFFGEBROIDS
Type of project: Doctoral thesis
Co-director of thesis: David Iglesias Ponte
Entity: University of La Laguna
City of entity: La Laguna, Canary Islands, Spain
Student: Diana de las Nieves Sosa Martín
Date of reading: 15/04/2008
- 14 Project title:** LIE GROUPS AND GROUPOIDS AND JACOBI STRUCTURES
Type of project: Doctoral thesis
Co-director of thesis: Juan Carlos Marrero
Entity: University of La Laguna
City of entity: La Laguna, Canary Islands, Spain
Student: David Iglesias Ponte
Date of reading: 11/07/2003
- 15 Project title:** HOMOLOGY AND COHOMOLOGY THEORIES FOR JACOBI, NAMBU-POISSON AND NAMBU-JACOBI MANIFOLDS
Type of project: Doctoral thesis
Co-director of thesis: María Edith Padrón Fernández
Entity: University of La Laguna
City of entity: La Laguna, Canary Islands, Spain
Student: Belén López Brito
Date of reading: 13/12/2002
- 16 Project title:** ON THE DE RHAM COHOMOLOGY OF PARALLEL LOCALLY D-CONFORMAL COSYMPLECTIC MANIFOLDS
Type of project: Minor thesis



Entity: University of La Laguna
City of entity: La Laguna, Canary Islands, Spain
Student: Diana de las Nieves Sosa Martín
Date of reading: 04/10/1999

17 Project title: MARSDEN-WEINSTEIN SYMPLECTIC REDUCTION

Type of project: Supervised Work
Entity: University of La Laguna
City of entity: La Laguna, Canary Islands, Spain
Student: David Iglesias Ponte
Date of reading: 1999

18 Project title: LOCALLY CONFORMAL KÄHLER SUBMERSIONS AND ALMOST CONTACT SUBMERSIONS WITH TOTAL SPACE A LOCALLY CONFORMAL COSYMPLECTIC MANIFOLD

Type of project: Doctoral thesis
Entity: University of La Laguna
City of entity: La Laguna, Canary Islands, Spain
Student: Juan Rocha Martín
Date of reading: 06/02/1995

19 Project title: GENERALIZED HOPF M-HYPERBOLIC MANIFOLDS

Type of project: Minor thesis
Entity: University of La Laguna
City of entity: La Laguna, Canary Islands, Spain
Student: Juan Rocha Martín
Date of reading: 10/09/1991

Other activities/achievements not included above

- 1 Description of the activity:** COORDINADOR IN THE UNIVERSITY OF LA LAGUNA OF THE INTERUNIVERSITY MASTER IN MATHEMATICAL MODELLING, IN MATHEMATICAL RESEARCH AND IN STATISTICAL AND COMPUTING SCIENCES (FROM SEPTEMBER 2013 UNTIL NOVEMBER 2014))
Organising entity: Universidad of La Laguna, La Rioja, Oviedo, Basque Country, Zaragoza and Public University of Navarra
End date: 31/10/2014
- 2 Description of the activity:** COORDINATOR IN THE UNIVERSITY OF LA LAGUNA OF THE INTERUNIVERSITY PhD PROGRAM IN MATHEMATICS AND STATISTICS (FROM SEPTEMBER 2013 UNTIL NOVEMBER 2014))
Organising entity: University of La Laguna, Oviedo, Zaragoza and Public University of Navarra
End date: 31/10/2014
- 3 Description of the activity:** COORDINATOR OF THE OFICIAL MASTER MATEMATICA AVANZADA: APLICACIONES Y EDUCACION" Y DEL PROGRAMA DE DOCTORADO DE LA ULL MATEMATICAS" (DESDE ENERO DE 2011 HASTA NOVIMEBRE DE 2014))
Organising entity: University of La Laguna
End date: 31/10/2014



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:** GEOMETRIA DE SISTEMAS DINAMICOS: DE LA TEORIA A LAS APLICACIONES II

Geographical area: National

Entity where project took place: University of La Laguna

Name principal investigator (PI, Co-PI....): Juan Carlos Marrero Gonzalez

Nº of researchers: 3

Funding entity or bodies:

Ministerio de Ciencia e Innovación. Universidades **Type of entity:** Ministerio

City funding entity: Madrid, Community of Madrid, Spain

Code according to the funding entity: PID2022-137909NB-C22

Start-End date: 2024 - 2027

Duration: 4 years

Total amount: 133.750 €

2 **Name of the project:** GEOMETRIA, MECANICA Y TEORIA CLASICA DE CAMPOS

Geographical area: National

Entity where project took place: University of La Laguna

Name principal investigator (PI, Co-PI....): Juan Carlos Marrero Gonzalez; David Iglesias Ponte

Nº of researchers: 3

Funding entity or bodies:

Ministerio de Ciencia e Innovación. Universidades **Type of entity:** Ministerio

City funding entity: Madrid, Community of Madrid, Spain

Code according to the funding entity: PGC2018-098265-B-C32

Start-End date: 01/01/2019 - 31/12/2021

3 **Name of the project:** GEOMETRY, MECHANICS AND CONTROL

Geographical area: National

Entity where project took place: University of La Laguna

Name principal investigator (PI, Co-PI....): Juan Carlos Marrero González

Funding entity or bodies:

Ministry of Science, Innovation and Universities

Name of the programme: Complementary Action

Code according to the funding entity: RED2018-102541-T

Start-End date: 01/01/2020 - 30/12/2021

Total amount: 9.000 €

4 **Name of the project:** GEOMETRY, MECHANICS AND CONTROL

Geographical area: National

Entity where project took place: University of La Laguna

Name principal investigator (PI, Co-PI....): Juan Carlos Marrero González

Funding entity or bodies:



Ministry of Economy and Competitiveness

Name of the programme: Complementary Action

Code according to the funding entity: MTM2015-69124-REDT

Start-End date: 01/12/2015 - 30/12/2017

Total amount: 35.000 €

5 Name of the project: GEOMETRIC MECHANICS, CLASSICAL FIELD THEORIES AND POISSON STRUCTURES

Geographical area: National

Entity where project took place: University of La Laguna

Name principal investigator (PI, Co-PI....): Juan Carlos Marrero González

Nº of researchers: 10

Funding entity or bodies:

Ministry of Science and Innovation

Code according to the funding entity: MTM2012-34478

Start-End date: 01/02/2013 - 31/01/2016

Total amount: 28.665 €

6 Name of the project: FINANTIAL SUPPORT FOR CONSOLIDATED RESEARCH GROUPS IN THE UNIVERSITY OF LA LAGUNA

Geographical area: local

Entity where project took place: University of La Laguna

Name principal investigator (PI, Co-PI....): Juan Carlos Marrero González

Funding entity or bodies:

University of La Laguna

Name of the programme: Finantial Support to the research in the University of La Laguna

Start-End date: 2015 - 2015

Total amount: 1.565 €

7 Name of the project: RESEARCH IN GEOMETRIC MECHANICS

Geographical area: Regional

Entity where project took place: University of La Laguna

Name principal investigator (PI, Co-PI....): J C Marrero

Nº of researchers: 5

Funding entity or bodies:

Canary Agency of Research, Innovation and Society of the Information

Code according to the funding entity: ProID20100210

Start-End date: 08/01/2011 - 07/01/2014

Total amount: 30.000 €

8 Name of the project: FINANTIAL SUPPORT FOR CONSOLIDATED RESEARCH GROUPS IN THE UNIVERSITY OF LA LAGUNA

Geographical area: local

Entity where project took place: University of La Laguna

Name principal investigator (PI, Co-PI....): Juan Carlos Marrero González

Funding entity or bodies:

University of La Laguna

Name of the programme: Finantial Support to the research in the University of La Laguna

Start-End date: 2014 - 2014



Total amount: 1.565 €

9 Name of the project: GEOMETRY, MECHANICS AND CONTROL

Geographical area: National

Entity where project took place: University of La Laguna

Name principal investigator (PI, Co-PI....): María Edith Padrón Fernández

Funding entity or bodies:

Ministry of Science and Innovation

Name of the programme: Complementary Action

Code according to the funding entity: MTM2011-15725-E

Start-End date: 01/05/2012 - 30/09/2013

Total amount: 15.000 €

10 Name of the project: GEOMECH. GEOMETRIC MECHANICS

Geographical area: European Union

Degree of contribution: Researcher

Entity where project took place: Ghent University

City of entity: Ghent, Belgium

Name principal investigator (PI, Co-PI....): Frans Cantrijn; David Martín De Diego

Funding entity or bodies:

European Commission

Code according to the funding entity: FP7-PEOPLE-2009-IRSES, 246981

Start-End date: 2010 - 2013

Total amount: 158.400 €

11 Name of the project: GEOMETRY, MECHANICS AND CLASSICAL FIELD THEORIES. SOME VARIATIONAL PROBLEMS

Geographical area: National

Entity where project took place: University of La Laguna

Name principal investigator (PI, Co-PI....): Juan Carlos Marrero González

Nº of researchers: 7

Funding entity or bodies:

Ministry of Science and Innovation

Code according to the funding entity: MTM2009-13383

Start-End date: 01/01/2010 - 31/12/2012

Total amount: 49.489,01 €

12 Name of the project: GEOMETRY, MECHANICS AND CONTROL

Geographical area: National

Entity where project took place: University of La Laguna

Name principal investigator (PI, Co-PI....): Juan Carlos Marrero González

Funding entity or bodies:

Ministry of Science and Innovation

Name of the programme: Complementary Action

Code according to the funding entity: MTM2010-12116-E

Start-End date: 01/02/2011 - 30/07/2012

Total amount: 15.000 €

**13 Name of the project:** iMATH WORKSHOP. SPANISH THEMATIC NETWORKS**Geographical area:** National**Degree of contribution:** Researcher**Entity where project took place:** University of La Laguna**Name principal investigator (PI, Co-PI....):** Edith Padrón Fernández**Nº of researchers:** 2**Funding entity or bodies:**

i-Math

Code according to the funding entity: SAIRT-CEXT-0463**Start-End date:** 2011 - 2012**Total amount:** 15.700 €**14 Name of the project:** CONSOLIDER MATHEMATICA**Geographical area:** National**Degree of contribution:** Researcher**Entity where project took place:** University of Cantabria**Name principal investigator (PI, Co-PI....):** Enrique Zuazua**Funding entity or bodies:**

Ministry of Science and Innovation

Code according to the funding entity: CSD2006-00032**Start-End date:** 2006 - 2012**Total amount:** 7.500.000 €**15 Name of the project:** DIFFERENTIAL GEOMETRY, MECHANICS AND CLASSICAL FIELD THEORIES: HAMILTON-JACOBI THEORY AND HARMONIC MAPS**Geographical area:** Regional**Entity where project took place:** University of La Laguna**Name principal investigator (PI, Co-PI....):** Juan Carlos Marrero González**Nº of researchers:** 8**Funding entity or bodies:**CENTRO DE ACUSTICA APLICADA Y
EVALUACION NO DESTRUCTIVA**Type of entity:** Associations and Groups

Canary Agency of Research, Innovation and Society of the Information

Code according to the funding entity: SOLSUBC200801000238**Start-End date:** 06/10/2009 - 02/11/2011**Total amount:** 38.500 €**16 Name of the project:** GEOMETRY, MECHANICS AND CONTROL**Geographical area:** National**Entity where project took place:** University of La Laguna**Name principal investigator (PI, Co-PI....):** Juan Carlos Marrero González**Funding entity or bodies:**

Ministry of Science and Innovation

Name of the programme: Complementary Action**Code according to the funding entity:** MTM2009-08166-E**Start-End date:** 01/02/2010 - 30/04/2011**Total amount:** 20.000 €



- 17** **Name of the project:** FINANTIAL SUPPORT FOR CONSOLIDATED RESEARCH GROUPS IN THE UNIVERSITY OF LA LAGUNA
Geographical area: local
Entity where project took place: University of La Laguna
Name principal investigator (PI, Co-PI....): Juan Carlos Marrero González
Funding entity or bodies:
University of La Laguna
Name of the programme: Finantial Support to the research in the University of La Laguna
Start-End date: 2011 - 2011
Total amount: 1.565 €
- 18** **Name of the project:** GEOMETRY, MECHANICS AND CONTROL
Geographical area: National
Entity where project took place: Universidad de La Laguna
Name principal investigator (PI, Co-PI....): Juan Carlos Marrero González
Funding entity or bodies:
Ministry of Science and Innovation
Name of the programme: Complementary Action
Code according to the funding entity: MTM2008-03606-E
Start-End date: 20/01/2009 - 20/04/2010
Total amount: 12.000 €
- 19** **Name of the project:** FINANTIAL SUPPORT FOR CONSOLIDATED RESEARCH GROUPS IN THE UNIVERSITY OF LA LAGUNA
Geographical area: local
Entity where project took place: University of La Laguna
Name principal investigator (PI, Co-PI....): Juan Carlos Marrero González
Funding entity or bodies:
University of La Laguna
Name of the programme: Finantial Support to the research in the University of La Laguna
Start-End date: 2010 - 2010
Total amount: 1.565 €
- 20** **Name of the project:** JOIN PROJECT BETWEEN INSTITUTE OF MATHEMATICS (POLISH ACADEMY OF SCIENCES) AND ICMAT (CSIC)
Geographical area: International
Degree of contribution: Researcher
Entity where project took place: Institute of Mathematics and Fundamental Physics, CSIC
Name principal investigator (PI, Co-PI....): Janusz Grabowski; M de León Rodríguez
Nº of researchers: 10
Funding entity or bodies:
CSIC
Code according to the funding entity: P2008PL01
Start-End date: 2009 - 2010
- 21** **Name of the project:** GEOMETRIC MECHANICS AND CLASSICAL FIELD THEORIES IN THE SETTING OF LIE ALGEBROIDS AND GROUPOIDS
Geographical area: National
Entity where project took place: University of La Laguna



Name principal investigator (PI, Co-PI....): Juan Carlos Marrero González

Nº of researchers: 4

Funding entity or bodies:

Ministry of Education and Science

Code according to the funding entity: MTM2006-03322

Start-End date: 01/10/2006 - 30/09/2009

Total amount: 46.669,7 €

22 Name of the project: GEOMETRY, MECHANICS AND CONTROL

Geographical area: National

Entity where project took place: University of La Laguna

Name principal investigator (PI, Co-PI....): Juan Carlos Marrero González

Funding entity or bodies:

Ministry of Education and Science

Name of the programme: Complementary Action

Code according to the funding entity: MTM2007-30168-E

Start-End date: 20/01/2008 - 20/04/2009

Total amount: 9.000 €

23 Name of the project: FINANTIAL SUPPORT FOR CONSOLIDATED RESEARCH GROUPS IN THE UNIVERSITY OF LA LAGUNA

Geographical area: local

Entity where project took place: University of La Laguna

Name principal investigator (PI, Co-PI....): Juan Carlos Marrero González

Funding entity or bodies:

University of La Laguna

Name of the programme: Finantial Support to the research in the University of La Laguna

Start-End date: 2009 - 2009

Total amount: 1.565 €

24 Name of the project: LOOKING FOR THE OPTIMAL

Geographical area: National

Degree of contribution: Researcher

Entity where project took place: University of La Laguna

Name principal investigator (PI, Co-PI....): Edith Padrón Fernández

Nº of researchers: 3

Funding entity or bodies:

CENTRO DE ACUSTICA APLICADA Y
EVALUACION NO DESTRUCTIVA

Type of entity: Associations and Groups

Canary Agency of Research, Innovation and Society of the Information

Name of the programme: Divulcation in Mathematics

Code according to the funding entity: Congre200901000031

Start-End date: 2009 - 2009

Total amount: 1.425 €

25 Name of the project: GEOMETRY, MECHANICS AND CONTROL

Geographical area: National

Entity where project took place: University of La Laguna

Name principal investigator (PI, Co-PI....): Juan Carlos Marrero González



Nº of researchers: 29

Funding entity or bodies:

Ministry of Education and Science

Name of the programme: Complementary Action

Code according to the funding entity: MTM2006-27467-E

Start-End date: 15/01/2007 - 26/06/2008

Total amount: 12.000 €

26 Name of the project: FINANCIAL SUPPORT FOR CONSOLIDATED RESEARCH GROUPS IN THE UNIVERSITY OF LA LAGUNA

Geographical area: local

Entity where project took place: University of La Laguna

Name principal investigator (PI, Co-PI....): Juan Carlos Marrero González

Funding entity or bodies:

University of La Laguna

Name of the programme: Financial Support to the research in the University of La Laguna

Start-End date: 2008 - 2008

Total amount: 1.565 €

27 Name of the project: XV INTERNATIONAL WORKSHOP ON GEOMETRY AND PHYSICS (SATELLITE CONFERENCE OF ICM2006)

Geographical area: National

Entity where project took place: University of La Laguna

Name principal investigator (PI, Co-PI....): Juan Carlos Marrero González

Nº of researchers: 5

Funding entity or bodies:

Ministry of Education and Science

Name of the programme: Complementary Action

Code according to the funding entity: MTM2005-24556-E

Start-End date: 01/09/2006 - 13/12/2007

Total amount: 3.000 €

28 Name of the project: GEOMETRY, MECHANICS AND CONTROL

Geographical area: National

Entity where project took place: University of La Laguna

City of entity: España,

Name principal investigator (PI, Co-PI....): Juan Carlos Marrero González

Funding entity or bodies:

Ministry of Education and Science

Name of the programme: Complementary Action

Code according to the funding entity: MTM2005-24556-E

Start-End date: 20/12/2005 - 20/03/2007

Total amount: 20.000 €

29 Name of the project: EQUIPMENT AND SCIENTIFIC-TECHNOLOGICAL INFRASTRUCTURE

Geographical area: Regional

Entity where project took place: University of La Laguna

Name principal investigator (PI, Co-PI....): Juan Carlos Marrero González

Nº of researchers: 12

**Funding entity or bodies:**

General Direction of Universities and Canary Government

Name of the programme: Scientific Equipment**Code according to the funding entity:** EQU2005/045**Start-End date:** 03/2006 - 03/2007**Total amount:** 10.880,43 €**30 Name of the project:** FIRST INTERNATIONAL SUMMER SCHOOL ON GEOMETRY, MECHANICS, AND CONTROL**Geographical area:** National**Degree of contribution:** Researcher**Entity where project took place:** University of La Laguna**Name principal investigator (PI, Co-PI....):** David Martín De Diego**Funding entity or bodies:**

I+MATH

Start-End date: 2007 - 2007**Total amount:** 6.000 €**31 Name of the project:** LIE ALGEBROIDS: RELATIONS WITH JACOBI GROUPOIDS, CLASSICAL FIELD THEORIES AND MULTISYMPLECTIC GEOMETRY**Geographical area:** National**Entity where project took place:** University of La Laguna**Name principal investigator (PI, Co-PI....):** Juan Carlos Marrero González**Nº of researchers:** 4**Funding entity or bodies:**

Ministry of Education and Science

Code according to the funding entity: BFM2003-01319**Start-End date:** 01/12/2003 - 30/11/2006**Total amount:** 102.040 €**32 Name of the project:** FINANCIAL SUPPORT FOR CONSOLIDATED RESEARCH GROUPS IN THE UNIVERSITY OF LA LAGUNA**Geographical area:** local**Entity where project took place:** University of La Laguna**Name principal investigator (PI, Co-PI....):** Juan Carlos Marrero González**Funding entity or bodies:**

University of La Laguna

Name of the programme: Financial Support to the research in the University of La Laguna**Start-End date:** 2006 - 2006**Total amount:** 1.565 €**33 Name of the project:** THEMATIC NETWORK ON GEOMETRY AND PHYSICS**Geographical area:** National**Degree of contribution:** Researcher**Entity where project took place:** Institute of Mathematics and Fundamental Physics, CSIC**Name principal investigator (PI, Co-PI....):** Oscar García de Prada**Funding entity or bodies:**

Ministry of Education and Science

Name of the programme: Complementary Action



Code according to the funding entity: MTM2004-22206-E

Start-End date: 2004 - 2005

Total amount: 6.000 €

34 Name of the project: THEMATIC NETWORK ON GEOMETRY AND PHYSICS

Geographical area: National

Degree of contribution: Researcher

Entity where project took place: Institute of Mathematics and Fundamental Physics, CSIC

Name principal investigator (PI, Co-PI....): Oscar García de Prada

Funding entity or bodies:

Ministry of Science and Technology

Name of the programme: Complementary Action

Code according to the funding entity: BFM2002-11010-E

Start-End date: 2003 - 2004

Total amount: 15.000 €

35 Name of the project: POISSON AND JACOBI BRACKETS AND MULTIBRACKETS, LIE ALGEBROIDS AND GROUPS AND HOMOLOGY AND COHOMOLOGY THEORIES

Geographical area: National

Entity where project took place: University of La Laguna

Name principal investigator (PI, Co-PI....): Juan Carlos Marrero González

Nº of researchers: 4

Code according to the funding entity: BFM2000-0808

Start-End date: 20/12/2000 - 19/12/2003

Total amount: 26.178,16 €

36 Name of the project: GEOMETRY AND DYNAMICS OF JACOBI AND GENERALIZED POISSON MANIFOLDS. GEOMETRICAL FORMULATION OF LAGRANGIAN SYSTEMS WITH CONSTRAINTS

Geographical area: National

Entity where project took place: University of La Laguna

Name principal investigator (PI, Co-PI....): Juan Carlos Marrero González

Nº of researchers: 5

Funding entity or bodies:

Ministry of Education and Science

Code according to the funding entity: PB97-1487

Start-End date: 02/10/1998 - 02/10/2000

Total amount: 15.000 €

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

1 Name of the project: COOPERATION AGREEMENT BETWEEN THE UNIVERSITY OF LA LAGUNA AND THE NATIONAL UNIVERSITY OF THE SOUTH (ARGENTINA) - GEOMETRIC MECHANICS AND CONTROL THEORY

Entity where project took place: University of La Laguna

Degree of contribution: Scientific coordinator

Entity where project took place: University of La Laguna

Name principal investigator (PI, Co-PI....): Hernán Cendra; Juan Carlos Marrero González

Nº of researchers: 7

Participating entity/entities: Universidad Nacional del Sur; Universidad de La Laguna

**Funding entity or bodies:**

National University of the South

University of La Laguna

Type of project: Cooperation**Start date:** 12/07/2010

- 2** **Name of the project:** COOPERATION AGREEMENT BETWEEN THE UNIVERSITY OF LA LAGUNA AND THE UNIVERSITY OF CUYO (ARGENTINA) - GEOMETRIC MECHANICS AND CONTROL THEORY

Entity where project took place: University of La Laguna**Degree of contribution:** Scientific coordinator**Entity where project took place:** University of La Laguna**Name principal investigator (PI, Co-PI....):** Sergio Grillo; Juan Carlos Marrero González**Nº of researchers:** 7**Participating entity/entities:** Universidad de Cuyo; Universidad de La Laguna**Funding entity or bodies:**

University of La Laguna

University of Cuyo

City funding entity: Argentina**Type of project:** Cooperation**Start date:** 04/05/2010

- 3** **Name of the project:** ASSOCIATED UNIT WITH SPANISH NATIONAL RESEARCH COUNCIL (CSIC) DIFFERENTIAL GEOMETRY AND GEOMETRIC MECHANICS

Entity where project took place: University of La Laguna**Degree of contribution:** Scientific coordinator**Entity where project took place:** University of La Laguna**Name principal investigator (PI, Co-PI....):** Juan Carlos Marrero González**Participating entity/entities:** Consejo Superior de Investigaciones Científicas; Universidad de La Laguna**Funding entity or bodies:**

CSIC

Type of project: Cooperation**Start date:** 20/12/2007

- 4** **Name of the project:** GEOMETRY AND DYNAMICS OF JACOBI MANIFOLDS

Name principal investigator (PI, Co-PI....): Juan Carlos Marrero González**Nº of researchers:** 3**Participating entity/entities:** Universidad de La Laguna**Start date:** 01/04/1997**Duration:** 1 year**Total amount:** 3.000 €

Scientific and technological activities

Scientific production

Publications, scientific and technical documents

- 1** F Gay-Balmaz; J C Marrero; N Martínez Alba. A NEW CANONICAL AFFINE BRACKET FORMULATION OF HAMILTONIAN CLASSICAL FIELD THEORIES. Rev. R. Acad. Cienc. Exactas Fís. Nat. Ser. A Mat. RACSAM. 118 - 3, pp. 60 pp.. 2024.
Type of production: Scientific paper
- 2** M de León; M Lainz; A López-Gordón; J C Marrero. A NEW PERSPECTIVE ON NONHOLONOMIC BRACKETS AND HAMILTON-JACOBI THEORY. J. Geom. Phys. 198, pp. Paper No. 105116 - 24 pp. 2024.
Type of production: Scientific paper
- 3** A Bravetti; S Grillo; J C Marrero; E Padrón. KIRILLOV STRUCTURES AND REDUCTION OF HAMILTONIAN SYSTEMS BY SCALING AND STANDARD SYMMETRIES. Studies in Applied Mathematics. 153 - 1, pp. <https://doi.org/10.1111/sapm.12681> - 53 pp. Wiley, 2024.
Type of production: Scientific paper
- 4** A Anahory; L Colombo; M de León; J C Marrero; D Martín; E Padrón. REDUCTION BY SYMMETRIES OF CONTACT MECHANICAL SYSTEMS ON LIE GROUPS. Preprint arXiv:2306.07022v2, to appear in Siam Journal on Applied Algebra and Geometry. 2024.
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- 5** D Iglesias-Ponte; J C Marrero; E Padron. MECHANICAL HAMILTONIAN SYSTEMS WITH RESPECT TO LINEAR POISSON STRUCTURES AND JACOBI-REEB DYNAMICS. Annal Math Phys. 13:10, pp. <https://doi.org/10.1007/s13324-022-00771-w>. 2023.
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- 7** A Anahory Simoes; S Ferraro; J C Marrero; D Martín de Diego. A NONHOLONOMIC NEWMARK METHOD. Journal of Computational and Applied Mathematics. 421, pp. Article Number114873 DOI10.1016/j.cam.2022.114873. 2022.
Type of production: Scientific paper
- 8** A Anahory Simoes; J C Marrero; D Martín de Diego. EXACT DISCRETE LAGRANGIAN MECHANICS FOR NONHOLONOMIC MECHANICS. Numer Math. 151 - 1, pp. 49 - 98. 2022.
Type of production: Scientific paper
- 9** A Anahory Simoes; J C Marrero; D Martín de Diego. JACOBI FIELDS IN NONHOLONOMIC MECHANICS. J Phys A: Math Theoret. 55 - 4, pp. Paper No. 045202, 53 pp. 2022.
Type of production: Scientific paper

- 10** Beniamino Cappelletti-Montano; Antonio de Nicola; Juan Carlos Marrero; Ivan Yudin. ALMOST FORMALITY OF QUASI-SASAKIAN AND VAISMAN MANIFOLDS WITH APPLICATIONS TO NILMANIFOLDS. Israel J Math. 241 - 1, pp. 37 - 87. 2021.
Type of production: Scientific paper
- 11** O Esen; M Lainz; M de León; J C Marrero. CONTACT DYNAMICS: LEGENDRIAN AND LAGRANGIAN SUBMANIFOLDS. Mathematics. 9, pp. 2704. 2021.
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- 17** B Cappelletti-Montano; A De Nicola; J C Marrero; I Yudin. HARD LEFSCHETZ THEOREM FOR COMPACT VAISMAN MANIFOLDS. Trans. Amer. Math. Soc. 371 - 2, pp. 755 - 776. 2019.
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Type of production: Scientific paper
- 23** J C Marrero; D Martin; E Martinez. ON THE EXACT DISCRETE LAGRANGIAN FUNCTION FOR VARIATIONAL INTEGRATORS: THEORY AND APPLICATIONS. Preprint, arXiv:1608.01586. 2016.
Type of production: Scientific paper
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Type of production: Scientific paper
- 25** G Bazzoni; J C Marrero; J Oprea. A SPLITTING THEOREM FOR COMPACT VAISMAN MANIFOLDS. Rend. Semin. Mat. Univ. Politec. Torino. 74 - 1-2, pp. 21 - 29. 2016.
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- 32** Y Fedorov; L García Naranjo; J C Marrero. UNIMODULARITY AND PRESERVATION OF VOLUMES IN NONHOLONOMIC MECHANICS. J Nonlinear Sci. 25 - 1, pp. 203 - 246. 2015.
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Type of production: Scientific paper
- 38** M de León; J C Marrero; D Martín de Diego; M Vaquero. ON THE HAMILTON-JACOBI THEORY FOR SINGULAR LAGRANGIAN SYSTEMS. J Math Physics. 54, pp. 032902 - 32 pages. 2013.
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- 39** D Iglesias; J C Marrero; M Vaquero. POLY-POISSON STRUCTURES. Lett Math Phys. 103, pp. 1103 - 1133. 2013.
Type of production: Scientific paper
- 40** C M Campos; E Guzmán; J C Marrero. CLASSICAL FIELD THEORIES OF FIRST ORDER AND LAGRANGIAN SUBMANIFOLDS OF PREMULTISYMPLECTIC MANIFOLDS. J Geom Mech. 4 - 1, pp. 1 - 26. 2012.
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- 42** J.C. Marrero; E. Padrón; M. Rodríguez Olmos. REDUCTION OF A SYMPLECTIC LIKE LIE ALGEBROID WITH MOMENTUM MAP AND ITS APPLICATION TO FIBERWISE LINEAR POISSON STRUCTURES. J Phys A: Math and Theoret. 45, 2012.
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- 45** A DE NICOLA; JC MARRERO; E PADRON. REDUCTION OF POISSON-NIJENHUIS LIE ALGEBROIDS TO SYMPLECTIC-NIJENHUIS LIE ALGEBROIDS WITH A NONDEGENERATE NIJENHUIS TENSOR. J Phys A: Math Theoret. 44, 425206, 2011.
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- 47** M de León; J C Marrero; D Martín de Diego. A GEOMETRIC HAMILTON-JACOBI THEORY FOR CLASSICAL FIELD THEORIES. Variations, Geometry and Physics. pp. 129 - 140. Nova Sci Publ New York, 2010.
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Type of production: Scientific paper **Format:** Journal
Relevant results: This paper was considered by the journal Nonlinearity as a featured article" that is, a paper of great interest for the contents of IOP (see <http://iopscience.iop.org/0951-7715/23/8/006>). The paper was included in Nonlinearity Highlights 2010 <http://cms.iopscience.iop.org/alfresco/d/d/workspace/SpacesStore/52c4a20f-aed5-11e0-8951-3d8f4fa53716/NON%20Highlights%202010.pdf>
- 49** M de León; J C Marrero; D Martín de Diego; M Salgado; S Vilariño. HAMILTON-JACOBI THEORY IN K-SYMPLECTIC FIELD THEORIES. Int J Geom Meth Mod Phys. 7, pp. 1491 - 1507. 2010.
Type of production: Scientific paper **Format:** Journal
- 50** J C Marrero. HAMILTONIAN MECHANICAL SYSTEMS ON LIE ALGEBROIDS, UNIMODULARITY AND PRESERVATION OF VOLUMES. J Geom Mech. 2, pp. 243 - 263. 2010.
Type of production: Scientific paper **Format:** Journal
- 51** M de León; J C Marrero; D Martín de Diego. LINEAR ALMOST POISSON STRUCTURES AND HAMILTON-JACOBI EQUATION. APPLICATIONS TO NONHOLONOMIC MECHANICS. J Geom Mech. 2, pp. 159 - 198. 2010.
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- 52** E Guzmán; J C Marrero. TIME-DEPENDENT MECHANICS AND LAGRANGIAN SUBMANIFOLDS OF PRESYMPLECTIC AND POISSON MANIFOLDS. J Phys A: Math Theoret. 43, pp. 505201. 2010.
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- 62** D. IGLESIAS; J.C. MARRERO; D. MARTÍN DE DIEGO; E. MARTÍNEZ; E. PADRÓN. REDUCTION OF SYMPLECTIC LIE ALGEBROIDS BY A LIE SUBALGEBROID AND A SYMMETRY LIE GROUP. *Symmetry Integrability and Geometry-Methods and Applications*. 4 (049), pp. 28 pp. 2007.
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- 81** A Ibori; M de León; E A Lacombe; J C Marrero; D Martín de Diego; P Pitanga. GEOMETRIC FORMULATION OF CARNOT'S THEOREM. J Phys A: Math and Gen. 34, pp. 1691 - 1712. 2001.
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- 87** D Iglesias; J C Marrero. SOME LINEAR JACOBI STRUCTURES ON VECTOR BUNDLES. C R Acad Sci Paris Serie I. 331, pp. 125 - 130. 2000.
Type of production: Scientific paper **Format:** Journal
- 88** A Ibrort; M de León; J C Marrero; D Martín de Diego. DIRAC BRACKETS IN CONSTRAINED DYNAMICS. Fortschr Phys. 47, pp. 459 - 492. 1999.
Type of production: Scientific paper **Format:** Journal
- 89** J.C. MARRERO; J. MONTERDE; E. PADRÓN. JACOBI-NIJENHUIS MANIFOLDS AND COMPATIBLE JACOBI STRUCTURES. C R Acad Sci Paris, Serie I. 329, pp. 797 - 802. 1999.
Type of production: Scientific paper **Format:** Journal
- 90** R. IBÁÑEZ; M. DE LEÓN; J.C. MARRERO; E. PADRÓN. LEIBNIZ ALGEBROID ASSOCIATED WITH A NAMBU-POISSON STRUCTURE. J Phys A: Math Gen. 32, pp. 8129 - 8144. 1999.
Type of production: Scientific paper **Format:** Journal
- 91** F Cantrijn; M de León; J C Marrero; D Martín de Diego. REDUCTION OF CONSTRAINED SYSTEMS WITH SYMMETRIES. J Math Phys. 40 - 2, pp. 795 - 820. 1999.
Type of production: Scientific paper **Format:** Journal
- 92** D Chinea; M de León; J C Marrero. A CANONICAL DIFFERENTIAL COMPLEX FOR JACOBI MANIFOLDS. Michigan Math J. 45, pp. 547 - 579. 1998.
Type of production: Scientific paper **Format:** Journal
- 93** A Ibrort; E A Lacomba; M de León; J C Marrero; D Martín de Diego; P Pitanga. GEOMETRIC FORMULATION OF MECHANICAL SYSTEMS SUBJECTED TO TIME-DEPENDENT ONE -SIDED CONSTRAINTS. J Phys A: Math Gen. 31, pp. 2655 - 2674. 1998.
Type of production: Scientific paper **Format:** Journal



- 94** R Ibáñez; M de León; J C Marrero. HOMOLOGY AND COHOMOLOGY ON GENERALIZED POISSON MANIFOLDS. J Phys A: Math Gen. 31, pp. 1253 - 1266. 1998.
Type of production: Scientific paper **Format:** Journal
- 95** R. IBÁÑEZ; M. DE LEÓN; J.C. MARRERO; E. PADRÓN. NAMBU-JACOBI AND GENERALIZED JACOBI MANIFOLDS. J Phys A: Math Gen. 31, pp. 1267 - 1286. 1998.
Type of production: Scientific paper **Format:** Journal
- 96** J.C. MARRERO; E. PADRÓN. NEW EXAMPLES OF COMPACT COSYMPLECTIC SOLVMANIFOLDS. Arch Math. 34, pp. 337 - 345. 1998.
Type of production: Scientific paper **Format:** Journal
- 97** R Ibáñez; M de León; J C Marrero; D Martín de Diego. REDUCTION OF GENERALIZED POISSON MANIFOLDS AND NAMBU-POISSON MANIFOLDS. Rep Math Phys. 42 - 3, pp. 71 - 90. 1998.
Type of production: Scientific paper **Format:** Journal
- 98** F Cantrijn; M de León; J C Marrero; D Martín de Diego. REDUCTION OF NONHOLONOMIC MECHANICAL SYSTEMS WITH SYMMETRIES. Rep Math Phys. 42, pp. 25 - 45. 1998.
Type of production: Scientific paper **Format:** Journal
- 99** R Ibáñez; M de León; J C Marrero; D Martín de Diego. COISOTROPIC AND LEGENDRE-LAGRANGIAN SUBMANIFOLDS AND CONFORMAL JACOBI-MORPHISMS. J Phys A: Math Gen. 30, pp. 5427 - 5444. 1997.
Type of production: Scientific paper **Format:** Journal
- 100** M de León; J C Marrero. COMPACT COSYMPLECTIC MANIFOLDS WITH TRANSVERSALLY POSITIVE DEFINITE RICCI TENSOR. Rendiconti di Matematica. 17, pp. 607 - 625. 1997.
Type of production: Scientific paper **Format:** Journal
- 101** J.C. MARRERO; E. PADRÓN. COMPACT GENERALIZED HOPF AND COSYMPLECTIC SOLVMANIFOLDS AND THE HEISENBERG GROUP $H(1,N)$. Israel J Math. 101, pp. 189 - 204. 1997.
Type of production: Scientific paper **Format:** Journal
- 102** R Ibáñez; M de León; J C Marrero; D Martín de Diego. DYNAMICS OF GENERALIZED POISSON AND NAMBU-POISSON BRACKETS. J Math Phys. 38 - 5, pp. 2332 - 2344. 1997.
Type of production: Scientific paper **Format:** Journal
- 103** M. DE LEÓN; J.C. MARRERO; E. PADRÓN. H-CHEVALLEY-EILENBERG COHOMOLOGY OF A JACOBI MANIFOLD AND JACOBI-CHERN CLASS. C R Acad Sci Paris, Serie I. 325, pp. 405 - 410. 1997.
Type of production: Scientific paper **Format:** Journal
- 104** M. DEL LEÓN; J.C. MARRERO; E. PADRÓN. LICHNEROWICZ-JACOBI COHOMOLOGY. J Phys A: Math Gen. 30, pp. 6029 - 6055. 1997.
Type of production: Scientific paper **Format:** Journal
- 105** M. DE LEON; J.C. MARRERO; E. PADRÓN. LICHNEROWICZ-JACOBI COHOMOLOGY OF JACOBI MANIFOLDS. C R Acad Sci Paris, Serie I. 324, pp. 71 - 76. 1997.
Type of production: Scientific paper **Format:** Journal
- 106** M de León; J C Marrero; D Martín de Diego. MECHANICAL SYSTEMS WITH NON-LINEAR CONSTRAINTS. Int J Theor Phys. 36 - 4, pp. 979 - 995. 1997.
Type of production: Scientific paper **Format:** Journal



- 107** M de León; J C Marrero; D Martín de Diego. NON-HOLONOMIC LAGRANGIAN SYSTEMS IN JET MANIFOLDS. J Phys A: Math Gen. 30, pp. 1167 - 1190. 1997.
Type of production: Scientific paper **Format:** Journal
- 108** M. DE LEÓN; J.C. MARRERO; E. PADRÓN. ON THE GEOMETRY QUANTIZATION OF JACOBI MANIFOLDS. J Math Phys. 38 - 12, pp. 6185 - 6213. 1997.
Type of production: Scientific paper **Format:** Journal
- 109** M de León; J C Marrero; G.M. Tuynmann. R^{2N+1} IS A UNIVERSAL CONTACT MANIFOLD FOR REDUCTION. J Phys A: Math Gen. 30, pp. 1605 - 1612. 1997.
Type of production: Scientific paper **Format:** Journal
- 110** D Chinea; M de León; J C Marrero. SPECTRAL SEQUENCES ON SASAKIAN AND COSYMPLECTIC MANIFOLDS. Houston J Math. 23 - 4, pp. 631 - 649. 1997.
Type of production: Scientific paper **Format:** Journal
- 111** J C Marrero; J Rocha. ON A PARTICULAR CLASS OF GENERALIZED HOPF MANIFOLDS. 25 Años de Matemáticas en la Universidad de La Laguna, Secretariado de Publicaciones de la Universidad de La Laguna. pp. 397 - 404. 1996.
Type of production: Scientific paper **Format:** Journal
- 112** D Chinea; M de León; J C Marrero. PREQUANTIZABLE POISSON MANIFOLDS AND JACOBI STRUCTURES. J Phys A: Math Gen. 29, pp. 6313 - 6324. 1996.
Type of production: Scientific paper **Format:** Journal
- 113** D Chinea; M de León; J C Marrero. THE CANONICAL DOUBLE COMPLEX FOR JACOBI MANIFOLDS. C R Acad Sci Paris, Serie I. 323, pp. 637 - 642. 1996.
Type of production: Scientific paper **Format:** Journal
- 114** M de León; J Marín Solano; J C Marrero. THE CONSTRAINT ALGORITHM IN THE JET FORMALISM. Diff Geom and its Appl. 6, pp. 275 - 300. 1996.
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- 115** M de León; J C Marrero; D Martín de Diego. TIME-DEPENDENT CONSTRAINED HAMILTONIAN SYSTEMS AND DIRAC BRACKETS. J Phys A: Math Gen. 29, pp. 6843 - 6859. 1996.
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- 116** D Chinea; M de León; J C Marrero. TOPOLOGY AND CURVATURE OF ALMOST COSYMPLECTIC MANIFOLDS. 25 Años de Matemáticas en la Universidad de La Laguna, Secretariado de Publicaciones de la Universidad de La Laguna. pp. 227 - 236. 1996.
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- 117** D Chinea; J C Marrero; J Rocha. ALMOST CONTACT SUBMERSIONS WITH TOTAL SPACE A LOCALLY CONFORMAL COSYMPLECTIC MANIFOLD. Annales de la Faculté des Sciences de Toulouse. IV - 3, pp. 473 - 517. 1995.
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- 118** D Chinea; M de León; J C Marrero. COEFFECTIVE COHOMOLOGY ON ALMOST COSYMPLECTIC MANIFOLDS. Bull Sci Math. 119, pp. 3 - 20. 1995.
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- 120** M de León; J C Marrero. COMPACT COSYMPLECTIC MANIFOLDS OF POSITIVE CONSTANT κ -SECTIONAL CURVATURE. Extracta Mathematicae. 9 - 1, pp. 28 - 31. 1994.
Type of production: Scientific paper **Format:** Journal
- 121** J C Marrero; J Rocha. LOCALLY CONFORMAL KÄHLER SUBMERSIONS. Geometriae Dedicata. 52, pp. 271 - 289. 1994.
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- 122** D Chinea; M de León; J C Marrero. THE CONSTRAINT ALGORITHM FOR TIME DEPENDENT LAGRANGIANS. J Math Phys. 35 - 7, pp. 3410 - 3447. 1994.
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Type of production: Scientific paper **Format:** Journal
- 124** J C Marrero; J Rocha. SASAKIAN M-HYPERBOLIC LOCALLY CONFORMAL KÄHLER MANIFOLDS. Rendiconti di Matematica. 13, pp. 41 - 74. 1993.
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- 125** D Chinea; M de León; J C Marrero. STABILITY OF INVARIANT FOLIATIONS ON ALMOST CONTACT MANIFOLDS. Publ Math Debrecen. 43 - 1-2, pp. 41 - 52. 1993.
Type of production: Scientific paper **Format:** Journal
- 126** D Chinea; M de León; J C Marrero. TOPOLOGY OF COSYMPLECTIC MANIFOLDS. J Math Pures et Appl. 72, pp. 567 - 591. 1993.
Type of production: Scientific paper **Format:** Journal
- 127** D Chinea; J C Marrero. CLASSIFICATIONS OF ALMOST CONTACT METRIC STRUCTURES. Rev Roumaine Math Pures Appl. 37, pp. 199 - 212. 1992.
Type of production: Scientific paper **Format:** Journal
- 128** D Chinea; J C Marrero. CONFORMAL CHANGES OF ALMOST CONTACT METRIC STRUCTURES. Riv di Mat Univ di Parma. 5 - 1, pp. 19 - 31. 1992.
Type of production: Scientific paper **Format:** Journal
- 129** D Chinea; J C Marrero. CONFORMAL CHANGES OF ALMOST COSYMPLECTIC MANIFOLDS. Rendiconti di Matematica. 12, pp. 849 - 867. 1992.
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- 130** J C Marrero. LOCALLY CONFORMAL COSYMPLECTIC MANIFOLDS FOLIATED BY GENERALIZED HOPF MANIFOLDS. Rendiconti di Matematica. 12, pp. 305 - 327. 1992.
Type of production: Scientific paper **Format:** Journal
- 131** J C Marrero. THE LOCAL STRUCTURE OF TRANS-SASAKIAN MANIFOLDS. Ann di Mat Pure ed Appl. CLXI, pp. 77 - 86. 1992.
Type of production: Scientific paper **Format:** Journal



- 132** D Chinea; M de León; J C Marrero. LOCALLY CONFORMAL COSYMPLECTIC MANIFOLDS AND TIME-DEPENDENT HAMILTONIAN SYSTEMS. *Commentationes Mathematicae Univ Carolinae*. 32, pp. 383 - 387. 1991.
Type of production: Scientific paper **Format:** Journal
- 133** D Chinea; M de León; J C Marrero. SYMPLECTIC AND COSYMPLECTIC FOLIATIONS ON COSYMPLECTIC MANIFOLDS. *Publications de L' Institut Mathématique*. 50 - 64, pp. 163 - 169. 1991.
Type of production: Scientific paper **Format:** Journal
- 134** J C Marrero. ALGUNAS PROPIEDADES DE CURVATURA DE VARIEDADES LOCALMENTE LOCALMENTE CONFORME CO-KAHLER. *Rev Acad Canar Cienc*. 1, pp. 261 - 270. 1990.
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- 135** D Chinea; J C Marrero. ON INVARIANT SUBMANIFOLDS OF LOCALLY CONFORMAL ALMOST COSYMPLECTIC MANIFOLDS. *Boll Unione Mat Italiana*. 7, pp. 357 - 364. 1990.
Type of production: Scientific paper **Format:** Journal
- 136** M de León; M Lainz; A López-Gordón; J C Marrero. NONHOLONOMIC BRACKETS: EDEN REVISITED. *Lecture Notes in Comput. Sci.* 14072, pp. 105 - 112. Springer, Cham, 2023.
Type of production: Book chapter
- 137** D Iglesias Ponte; J C Marrero González; F Martín Cabrera; E Padrón Fernández; D Sosa Martín. XV INTERNATIONAL WORKSHOP ON GEOMETRY AND PHYSICS. PAPERS FROM THE WORKSHOP HELD IN PUERTO DE LA CRUZ, SEPTEMBER 11-16, 2006. *Publicaciones de la Real Sociedad Matemática Española*. 11, pp. 366 pp. Madrid(Spain): 2007. ISBN 978-84-935196-1-2
Type of production: Scientific book or monograph
- 138** I Androulidakis; H Bursztyn; J C Marrero; A Weinstein. PREFACE TO SPECIAL ISSUE IN HONOR OF KIRILL C. H. MACKENZIE: PART I. *J Geom Mech*. 13 - 3, pp. i - ix. 2021.
Type of production: Preface

Works submitted to national or international conferences

- 1** **Title of the work:** RETRACTIONS MAPS AND GEOMETRIC INTEGRATION II
Name of the conference: WORKSHOP ON GEOMETRIC CONTROL AND MECHANICS
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Thessaloniki, Greece
Date of event: 05/07/2024
End date: 06/07/2024
Organising entity: ACT WEST HALL, ROOM 105
- 2** **Title of the work:** A NEW CANONICAL AFFINE BRACKET FORMULATION OF HAMILTONIAN CLASSICAL FIELDS THEORIES OF FIRST ORDER
Name of the conference: THE GEOMETRY OF FIELD THEORIES
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Madrid, Spain
Date of event: 13/06/2024
End date: 15/06/2024
Organising entity: REAL COLEGIO MARIA CRISTINA, EL ESCORIAL



- 3** **Title of the work:** ALMOST POISSON BRACKETS FOR NONHOLONOMIC SYSTEMS WITH GYROSCOPIC TERMS AND HAMILTONISATION
Name of the conference: DELEONFEST 2023: AN INTERDISCIPLINARY CONFERENCE ON GEOMETRIC MECHANICS AND RELATED FIELDS
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Madrid, Spain
Date of event: 11/12/2023
End date: 13/12/2023
Organising entity: INSTITUTO DE CIENCIAS MATEMATICAS
Type of entity: State agency
- 4** **Title of the work:** NONHOLONOMIC BRACKETS AND HAMILTON-JACOBI THEORY: FROM EDEN TO THE PRESENT DAY
Name of the conference: DYNAMICAL SYSTEMS, MECHANICS AND CONTROL: A WORKSHOP IN HONOR TO ANTHONY BLOCH
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Miraflores de la Sierra, Madrid, Spain
Date of event: 12/07/2023
End date: 14/07/2023
Organising entity: INSTITUTO DE CIENCIAS MATEMATICAS
Type of entity: State agency
- 5** **Title of the work:** UNIMODULARITY AND INVARIANT VOLUME FORMS FOR HAMILTONIAN DYNAMICS ON POISSON-LIE GROUPS
Name of the conference: SECOND JOINT MEETING RSME-UMA
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Ronda, Malaga, Spain
Date of event: 12/12/2022
End date: 16/12/2022
Organising entity: University of Malaga
- 6** **Title of the work:** FROM SYMPLECTIC TO KIRILLOV HAMILTONIAN SYSTEMS ... ALONG THE WAY POISSON AND CONTACT STRUCTURES
Name of the conference: FOCUSED RESEARCH GROUP IN GEOMETRIC STRUCTURES AND THEIR APPLICATIONS
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Madrid, Spain
Date of event: 20/06/2022
End date: 23/06/2022
Organising entity: INSTITUTO DE CIENCIAS MATEMATICAS
Type of entity: State agency
- 7** **Title of the work:** KINEMATIC NONHOLONOMIC DYNAMICS IS NEITHER HAMILTONIAN NOR VARIATIONAL AND HOWEVER ...
Name of the conference: CLAM 2021, VI CONGRESO LATINOAMERICANO DE MATEMATICAS (SESION GEOMETRIA, MECANICA Y CONTROL), EVENTO VIRTUAL
Type of event: Conference



Type of participation: Participatory - invited/keynote talk

City of event: Montevideo, Uruguay

Date of event: 13/09/2021

End date: 17/09/2021

Organising entity: Uruguay, Montevideo

- 8 Title of the work:** INVARIANT MEASURES FOR CONTACT HAMILTONIAN SYSTEMS: SYMPLECTIC SANDWICHES WITH CONTACT BREAD

Name of the conference: ICMAT GEOMETRY SEMINAR, GEOMETRY

Type of event: Seminar

Type of participation: Participatory - invited/keynote talk

City of event: On-line Seminar, Spain

Date of event: 16/12/2020

Organising entity: INSTITUTO DE CIENCIAS MATEMATICAS

Type of entity: State agency

- 9 Title of the work:** KINETIC NONHOLONOMIC DYNAMICS IS NEITHER HAMILTONIAN NOR VARIATIONAL AND HOWEVER ...

Name of the conference: GEOMETRY, DYNAMICS AND MECHANICS SEMINAR

Type of event: Seminar

Type of participation: Participatory - invited/keynote talk

City of event: On-line seminar, Italy

Date of event: 01/12/2020

Organising entity: University of Padova

- 10 Title of the work:** CONTACT HAMILTONIAN SYSTEMS, REEB-LIOUVILLE DYNAMICS AND INVARIANT MEASURES

Name of the conference: CONTACT AND POISSON GEOMETRY

Type of event: Conference

Type of participation: Participatory - invited/keynote talk

City of event: Timisoara, Romania

Date of event: 2019

Organising entity: University of Timisiora

- 11 Title of the work:** ON HAMILTON-DE DONDER-WEYL EQUATIONS

Name of the conference: XX WINTER MEETING ON GEOMETRY, MECHANICS AND CONTROL

Type of event: Conference

Type of participation: Participatory - invited/keynote talk

City of event: Zaragoza, Spain

Date of event: 2019

Organising entity: University of Zaragoza

- 12 Title of the work:** ON HAMILTONISATION OF NONHOLONOMIC CHAPLYGIN SYSTEMS

Name of the conference: Campus América, Jornada Dinámica, Control y Geometría

Type of event: Conference

Type of participation: Participatory - invited/keynote talk

City of event: La Laguna, Spain

Date of event: 2019

Organising entity: University of La Laguna

- 13** **Title of the work:** ON A NEW AFFINE FORMULATION OF HAMILTONIAN CLASSICAL FIELD THEORIES
Name of the conference: CLASSICAL AND QUANTUM PHYSICS: GEOMETRY, DYNAMICS AND CONTROL; 60 years Alberto Iborr Fest
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Madrid, Spain
Date of event: 2018
Organising entity: ICMAT, CSIC
- 14** **Title of the work:** ON HAMILTONISATION OF CHAPLYGIN NONHOLONOMIC SYSTEMS
Name of the conference: II JOINT MEETING RSME-SEMA-SBM-SBMAC
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Cadiz, Spain
Date of event: 2018
Organising entity: University of Cadiz
- 15** **Title of the work:** ON A NEW AFFINE FORMULATION OF HAMILTONIAN CLASSICAL FIELD THEORIES
Name of the conference: NEW TRENDS ON APPLIED GEOMETRIC MECHANICS; CELEBRATING DARRY HOLM'S 70th
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Madrid, Spain
Date of event: 2017
Organising entity: Institute of Mathematical Sciences
- 16** **Title of the work:** A NEW GEOMETRIC FORMULATION OF HAMILTONIAN CLASSICAL FIELD THEORIES OF FIRST ORDER
Name of the conference: SPECIAL SESSION 6: RECENT ADVANCES IN GEOMETRY, MECHANICS AND CONTROL, BIENAL RSME
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Zaragoza, Spain
Date of event: 2017
Organising entity: University of Zaragoza
- 17** **Title of the work:** MODELS FOR COMPACT QUASI-SASAKIAN AND QUASI-VAISMAN MANIFOLDS AND APPLICATIONS TO COMPACT NILMANIFOLDS
Name of the conference: SPECIAL SESSION 25: GEOMETRIC STRUCTURES IN MANIFOLDS AND APPLICATIONS, BIENAL RSME
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Zaragoza, Spain
Date of event: 2017
Organising entity: University of Zaragoza
- 18** **Title of the work:** MODELS FOR COMPACT QUASI-SASAKIAN AND QUASII-VAISMAN MANIFOLDS AND APPLICATIONS TO COMPACT NILMANIFOLDS
Name of the conference: THIRD SPANISH-JAPANESE WORKSHOP ON DIFFERENTIAL GEOMETRY
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Madrid, Spain



Date of event: 2017

Organising entity: Institute of Mathematical Sciences (CSIC)

19 Title of the work: ON A NEW FORMULATION OF HAMILTONIAN CLASSICAL FIELD THEORIES

Name of the conference: FIRST JOINT MEETING RSME-UMA

Type of event: Conference

Type of participation: Participatory - invited/keynote talk

City of event: Buenos Aires, Argentina

Date of event: 2017

Organising entity: University of Buenos Aires

20 Title of the work: THE EXACT DISCRETE LAGRANGIAN FUNCTION ON A LIE GROUPOID: THEORY AND APPLICATIONS

Name of the conference: GEOMETRIC STRUCTURES ON LIE GROUPOIDS

Type of event: Conference

Type of participation: Participatory - invited/keynote talk

City of event: Banff, Alberta, Canada

Date of event: 2017

Organising entity: Banff International Research Station

21 Title of the work: ON LOCALLY CONFORMAL SYMPLECTIC MANIFOLDS OF THE FIRST KIND

Name of the conference: LECTURE IN CMUC AND DEPARTMENT OF MATHEMATICS

Type of event: Seminar

Type of participation: Participatory - invited/keynote talk

City of event: Coimbra, Portugal

Date of event: 2016

Organising entity: University of Coimbra

22 Title of the work: ON THE EXACT DISCRETE LAGRANGIAN FUNCTION FOR VARIATIONAL INTEGRATORS

Name of the conference: LECTURE IN THE DEPARTMENT OF MATHEMATICS

Type of event: Seminar

Type of participation: Participatory - invited/keynote talk

City of event: Salerno, Italy

Date of event: 2016

Organising entity: University of Salerno

23 Title of the work: HAMILTON-POINCARÉ FIELD EQUATIONS

Name of the conference: GEOMETRY OF JETS AND FIELDS

Type of event: Conference

Type of participation: Participatory - invited/keynote talk

City of event: Bedlewo, Poland

Date of event: 2015

Organising entity: Banach Center, IMPAN

24 Title of the work: ON AN AFFINE FORMULATION OF HAMILTONIAN CLASSICAL FIELD THEORIES

Name of the conference: FIRST JOINT MEETING BRAZIL-SPAIN IN MATHEMATICS

Type of event: Conference

Type of participation: Participatory - invited/keynote talk

City of event: Fortaleza, Brazil

Date of event: 2015



Organising entity: Sociedad Brasileira de Matematica

- 25** **Title of the work:** THE EXACT DISCRETE LAGRANGIAN FUNCTION IN THE LIE GRUPOID SETTING
Name of the conference: LECTURE IN CMUC AND DEPARTMENT OF MATHEMATICS
Type of event: Seminar
Type of participation: Participatory - invited/keynote talk
City of event: Coimbra, Portugal
Date of event: 2015
Organising entity: University of Coimbra
- 26** **Title of the work:** FROM BASIC ASPECTS OF POISSON STRUCTURES TO INVARIANT MEASURES IN NONHOLONOMIC MECHANICS
Name of the conference: SECOND JAPANESE-SPANISH WORKSHOP ON DIFFERENTIAL GEOMETRY
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Tokyo, Japan
Date of event: 2014
Organising entity: Tokyo Institute of Technology
- 27** **Title of the work:** THE EXACT DISCRETE LAGRANGIAN FUNCTION ON A LIE GROUPOID
Name of the conference: 10TH AIMS CONFERENCE ON DYNAMICAL SYSTEMS, DIFFERENTIAL EQUATIONS AND APPLICATIONS
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Madrid, Spain
Date of event: 2014
Organising entity: American Institute of Mathematical Sciences
- 28** **Title of the work:** THE EXACT DISCRETE LAGRANGIAN FUNCTION ON A LIE GRUPOID
Name of the conference: FOUNDATIONS OF COMPUTATIONAL MATHEMATICS, FoCM 2014
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Montevideo, Uruguay
Date of event: 2014
Organising entity: University of the Republic
- 29** **Title of the work:** INVARIANT VOLUME FORMS IN NONHOLONOMIC MECHANICS, 11 YEARS LATER
Name of the conference: DELEONFEST
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Madrid, Spain
Date of event: 2013
Organising entity: Institute of Mathematical Sciences (CSIC)
- 30** **Title of the work:** AN INTRODUCTION TO DISCRETE MECHANICS ON LIE GROUPOIDS
Name of the conference: COLLOQUIUM ON APPLIED MATHEMATICS IIMAS
Type of event: Workshop
Type of participation: Participatory - invited/keynote talk
City of event: México D F, Mexico
Date of event: 2013
Organising entity: IIMAS-UNAM



- 31** **Title of the work:** FURTHER EVIDENCE THAT EVERYTHING IN CLASSICAL MECHANICS IS A LAGRANGIAN SUBMANIFOLD
Name of the conference: GEOMETRY DAY
Type of event: Workshop
Type of participation: Participatory - invited/keynote talk
City of event: Coimbra, Portugal
Date of event: 2013
Organising entity: University of Coimbra
- 32** **Title of the work:** TULCZYJEW VIA MARSDEN-WEINSTEIN: UN HOMENAJE A MDL
Name of the conference: 3RD CONFERENCE ON GEOMETRIC MECHANICS: A TRIBUTE TO MDL
Type of event: Workshop
Type of participation: Participatory - invited/keynote talk
City of event: La Laguna, Spain
Date of event: 2013
Organising entity: Department of Fundamental Mathematics, University of La Laguna
- 33** **Title of the work:** FROM SOME BASIC ASPECTS IN POISSON GEOMETRY TO INVARIANT MEASURES IN NONHOLONOMIC MECHANICS
Name of the conference: DIFFERENTIAL GEOMETRY DAYS IN HONOUR OF LUIS A CORDERO
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Santiago de Compostela, Spain
Date of event: 2012
Organising entity: University of Santiago de Compostela
- 34** **Title of the work:** HAMILTON-JACOBI THEORY AND HAMILTONIAN SYSTEMS WITH RESPECT TO FIBER-WISE LINEAR POISSON STRUCTURES
Name of the conference: 9TH AIMS CONFERENCE ON DYNAMICAL SYSTEMS, DIFFERENTIAL EQUATIONS AND APPLICATIONS
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Orlando, Florida, United States of America
Date of event: 2012
Organising entity: American Institute of Mathematical Sciences
- 35** **Title of the work:** HAMILTON-JACOBI THEORY AND INTEGRABILITY
Name of the conference: FOCUS PROGRAM ON GEOMETRY, MECHANICS AND DYNAMICS, THE LEGACY OF JERRY MARSDEN AT FIELDS INSTITUTE, TORONTO
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Toronto, Canada
Date of event: 2012
Organising entity: Fields Institute for Research in Mathematical Sciences
- 36** **Title of the work:** FROM MARSDEN-WEINSTEIN REDUCTION TO THE POISSON SPHERES
Name of the conference: DYNAMICAL SYSTEMS, MECHANICS AND GEOMETRY DAY
Type of event: Workshop
Type of participation: Participatory - invited/keynote talk
City of event: México City, Mexico



Date of event: 2012

Organising entity: ITAM

37 Title of the work: FROM SOME BASIC ASPECTS IN POISSON GEOMETRY TO INVARIANT MEASURES IN NONHOLONOMIC MECHANICS

Name of the conference: THEMATIC DAY ON POISSON GEOMETRY AND APPLICATIONS

Type of event: Workshop

Type of participation: Participatory - invited/keynote talk

City of event: Zaragoza, Spain

Date of event: 2012

Organising entity: University of Zaragoza

38 Title of the work: KINEMATIC REDUCTION AND THE HAMILTON-JACOBI EQUATION

Name of the conference: GEOMETRY AND PHYSICS DAY

Type of event: Workshop

Type of participation: Participatory - invited/keynote talk

City of event: Coimbra, Portugal

Date of event: 2012

Organising entity: University of Coimbra

39 Title of the work: COISOTROPIC SUBMANIFOLDS OF LINEAR POISSON MANIFOLDS AND LAGRANGIAN ANCHORED VECTOR SUBBUNDLES OF THE SYMPLECTIC COVER

Name of the conference: XX INTERNATIONAL FALL WORKSHOP ON GEOMETRY AND PHYSICS

Type of event: Conference

Type of participation: Participatory - poster

City of event: Madrid, Spain

Date of event: 2011

Organising entity: Institute of Mathematical Sciences

Type of contribution: Scientific paper

M Aymerich; J C Marrero. "COISOTROPIC SUBMANIFOLDS OF LINEAR POISSON MANIFOLDS AND LAGRANGIAN ANCHORED VECTOR SUBBUNDLES OF THE SYMPLECTIC COVER". En: XX INTERNATIONAL FALL WORKSHOP ON GEOMETRY AND PHYSICS, AIP CONF PROC. 1460, pp. 154 - 158. 2012.

40 Title of the work: MARSDEN-WEINSTEIN REDUCTION THEORY FOR THE SYMPLECTIC PROLONGATION OF A LIE ALGEBROID

Name of the conference: POISSON GEOMETRY AND ITS APPLICATIONS

Type of event: Workshop

Type of participation: Participatory - invited/keynote talk

City of event: Coimbra, Portugal

Date of event: 2011

Organising entity: University of Coimbra

41 Title of the work: INVARIANT MEASURES IN NONHOLONOMIC MECHANICS

Name of the conference: APPLIED DYNAMICS AND GEOMETRIC MECHANICS

Type of participation: Participatory - invited/keynote talk

City of event: Germany

Date of event: 2011

Organising entity: Mathematisches Forschungsinstitut Oberwolfach



- 42** **Title of the work:** SKEW-SYMMETRIC ALGEBROIDS AND NONHOLONOMIC MECHANICS
Name of the conference: 1 ST GONE FISHING – POISSON GEOMETRY CONFERENCE
Type of participation: Participatory - invited/keynote talk
City of event: St Louis, United States of America
Date of event: 2011
Organising entity: Washington University
City organizing entity: United States of America
- 43** **Title of the work:** SKEW-SYMMETRIC ALGEBROIDS AND NONHOLONOMIC MECHANICS
Name of the conference: GMFTC: a Workshop celebrating the 65 birthday of Miguel Muñoz
Type of participation: Participatory - invited/keynote talk
City of event: Barcelona, Spain
Date of event: 2011
Organising entity: Polytechnical University of Catalonia
- 44** **Title of the work:** SYMPLECTIC GROUPOIDS AND DISCRETE CONSTRAINED LAGRANGIAN MECHANICS
Name of the conference: NEW DEVELOPMENTS IN GEOMETRIC MECHANICS: DISCRETE AND CONTINUOUS SETTINGS
Type of participation: Participatory - oral communication
City of event: Varsovia, Poland
Date of event: 2011
Organising entity: Institute of Mathematics, Polish Academy of Sciences
- 45** **Title of the work:** HAMILTONIAN DYNAMICS ON LIE ALGEBROIDS, UNIMODULARITY AND PRESERVATION OF VOLUMES
Name of the conference: 3 rd IBERIAN MATHEMATICAL MEETING
Type of participation: Participatory - invited/keynote talk
City of event: Braga, Portugal
Date of event: 2010
Organising entity: University of Minho
- 46** **Title of the work:** HAMILTONIAN MECHANICS ON SKEW-SYMMETRIC ALGEBROIDS, UNIMODULARITY AND PRESERVATION OF VOLUMES IN NONHOLONOMIC MECHANICS
Name of the conference: 8 AIMS INTERNATIONAL CONFERENCE ON DYNAMICAL SYSTEMS, DIFFERENTIAL EQUATIONS AND APPLICATIONS; SPECIAL SESSION: GEOMETRIC MECHANICS
Type of participation: Participatory - oral communication
City of event: Dresden, Germany
Date of event: 2010
Organising entity: Technical University of Dresden
- 47** **Title of the work:** MARSDEN-WEINSTEIN REDUCTION THEOREM FOR SYMPLECTIC LIE ALGEBROIDS AND SOME APPLICATIONS
Name of the conference: VI INTERNATIONAL SYMPOSIUM HAMSYS-2010 (Honouring E A Lacombe in his 65th Anniversary)
Type of participation: Participatory - invited/keynote talk
City of event: Mexico City, Mexico
Date of event: 2010
Organising entity: Universidad Autónoma Metropolitana



- 48** **Title of the work:** SYMMETRIES, NOETHER THEOREM AND REDUCTION IN K-COSYMPLECTIC FIELD THEORIES
Name of the conference: XVIII INTERNATIONAL FALL WORKSHOP ON GEOMETRY AND PHYSICS
Type of event: Conference
Type of participation: 'Participatory - poster
City of event: Benasque, Zaragoza, Spain
Date of event: 2009
Organising entity: University of Zaragoza
Type of contribution: Scientific paper
J C Marrero; N Román Roy; M Salgado; S Vilariño. "SYMMETRIES, NOETHER THEOREM AND REDUCTION IN K-COSYMPLECTIC FIELD THEORIES". En: AIP Conference Proceedings. 1260, pp. 173 - 179. 2010.
- 49** **Title of the work:** HAMILTONIAN DYNAMICS ON LIE ALGEBROIDS, UNIMODULARITY AND PRESERVATION OF VOLUMES
Name of the conference: IUMA DAY ON GEOMETRY, MECHANICS AND CONTROL
Type of event: Workshop
Type of participation: Participatory - invited/keynote talk
City of event: Zaragoza, Spain
Date of event: 2009
Organising entity: University of Zaragoza
- 50** **Title of the work:** BRACKETS IN MECHANICS: OLD AND NEW RESULTS
Name of the conference: XXIV INTERNATIONAL WORKSHOP ON DIFFERENTIAL GEOMETRIC METHODS IN THEORETICAL MECHANICS
Type of participation: Participatory - invited/keynote talk
City of event: Levico Terme, Trento, Italy
Date of event: 2009
Organising entity: University of Trento
- 51** **Title of the work:** HAMILTON-JACOBI EQUATION AND NONHOLONOMIC MECHANICAL SYSTEMS SUBJECTED TO LINEAR CONSTRAINTS
Name of the conference: GEOMETRY OF CONSTRAINTS AND CONTROL
Type of participation: Participatory - oral communication
City of event: Varsovia, Poland
Date of event: 2009
Organising entity: Institute of Mathematics, Polish Academy of Sciences
- 52** **Title of the work:** THE EXACT DISCRETE LAGRANGIAN FUNCTION ON A LIE GROUPOID
Name of the conference: VARIATIONAL INTEGRATORS IN NONHOLONOMIC AND VAKONOMIC MECHANICS: AN EXPLORATORY WORKSHOP
Type of participation: Participatory - invited/keynote talk
City of event: Madrid, Spain
Date of event: 2009
- 53** **Title of the work:** GEOMETRY OF VARIATIONAL NONHOLONOMIC LAGRANGIAN SYSTEMS WITH SYMMETRIES
Name of the conference: DYNAMICAL SYSTEMS, DIFFERENTIAL EQUATIONS AND APLLICATIONS
Type of event: Conference
Type of participation: Participatory - oral communication
City of event: Arlington, Texas, United States of America
Date of event: 2008



Organising entity: University of Arlington
J C Marrero.

- 54** **Title of the work:** LEIBNIZ ALGEBROIDS AND MECHANICS: SOME IDEAS
Name of the conference: CONFERENCE ON GEOMETRIC MECHANICS
Type of event: Workshop
Type of participation: Participatory - oral communication
City of event: La Laguna, Tenerife, Spain
Date of event: 2008
Organising entity: University of La Laguna
- 55** **Title of the work:** CONTINUOUS MECHANICS AND LIE ALGEBROIDS
Name of the conference: II INTERNATIONAL SUMMER SCHOOL ON GEOMETRY, MECHANICS AND CONTROL
Type of event: Escuela Internacional
Type of participation: Participatory - oral communication
City of event: Sta. Cruz de La Palma, I Canarias, Spain
Date of event: 2008
Organising entity: University of La Laguna
- 56** **Title of the work:** GEOMETRY OF VARIATIONAL NONHOLONOMIC LAGRANGIAN SYSTEMS WITH SYMMETRIES
Name of the conference: IBEROAMERICAN MEETING ON DIFFERENTIAL GEOMETRY AND ITS APPLICATIONS
Type of participation: Participatory - oral communication
City of event: La Laguna, Spain
Date of event: 2008
Organising entity: University of La Laguna
- 57** **Title of the work:** MULTISYMPLECTIC GEOMETRY AND CLASICAL FIELD THEORY
Name of the conference: ENCUESTRO MATEMATICO HISPANO-MARROQUI
Type of participation: Participatory - invited/keynote talk
City of event: Casablanca, Morocco
Date of event: 2008
Organising entity: International University of Casablanca
- 58** **Title of the work:** NONHOLONOMIC MECHANICS: A LIE ALGEBROID PERSPECTIVE
Name of the conference: I IBEROAMERICAN MEETING ON GEOMETRY, MECHANICS AND CONTROL
Type of participation: Participatory - invited/keynote talk
City of event: Santiago de Compostela, Spain
Date of event: 2008
Organising entity: University of Santiago de Compostela
- 59** **Title of the work:** THE UBIQUITY OF THE SYMPLECTIC HAMILTONIAN EQUATIONS IN MECHANICS
Name of the conference: CONSTRAINTS AND CONTROL
Type of participation: Participatory - oral communication
City of event: Varsovia, Poland
Date of event: 2008
Organising entity: Institute of Mathematics, Polish Academy of Sciences



- 60** **Title of the work:** VAKONOMICS MECHANICS ON LIE AFFGEBROIDS
Name of the conference: XVI FALL WORKSHOP ON GEOMETRY AND PHYSICS
Type of event: Conference
Type of participation: 'Participatory - poster
City of event: Lisboa, Portugal
Date of event: 2007
Organising entity: Institute Politecnico de Lisboa
Type of contribution: Scientific paper
J C Marrero; D Sosa. "VAKONOMICS MECHANICS ON LIE AFFGEBROIDS". En: AIP Conf. Proc. 1023. pp. 187. 2008.
- 61** **Title of the work:** HAMILTON-JACOBI THEORY ON ALMOST LIE ALGEBROIDS AND NONHOLONOMIC MECHANICS
Name of the conference: WORKSHOP ON MECHANICS AND LIE ALGEBROIDS
Type of participation: Participatory - invited/keynote talk
City of event: Lisboa, Portugal
Date of event: 2007
Organising entity: Institute Politecnico de Lisboa
- 62** **Title of the work:** INTRODUCCIÓN Á MECÁNICA NO HOLÓNOMA
Name of the conference: ENCONTRO NOVOS MÉTODOS XEOMÉTRICOS EN MECÁNICA E TEORÍA DE CAMPOS
Type of participation: Participatory - invited/keynote talk
City of event: Vigo, Spain
Date of event: 2007
Organising entity: University of A Coruña
- 63** **Title of the work:** DISCRETE NONHOLONOMIC LAGRANGIAN SYSTEMS ON LIE GROUPOIDS
Name of the conference: NUMERICAL INTEGRATION OF NONHOLONOMIC SYSTEMS
Type of event: Workshop
Type of participation: Participatory - invited/keynote talk
City of event: Madrid, Spain
Date of event: 2006
Organising entity: CSIC
- 64** **Title of the work:** MARSDEN-WEINSTEIN REDUCTION THEOREM FOR SYMPLECTIC LIE ALGEBROIDS
Name of the conference: GEOMETRIC ASPECTS OF INTEGRABLE SYSTEMS
Type of participation: Participatory - invited/keynote talk
City of event: Coimbra, Portugal
Date of event: 2006
Organising entity: University of Coimbra
- 65** **Title of the work:** LAGRANGIAN SUBMANIFOLDS AND DISCRETE DYNAMICS ON LIE GROUPOIDS
Name of the conference: ICM2006
Type of participation: 'Participatory - poster
City of event: Madrid, Spain
Date of event: 2006
D Iglesias; J C Marrero; D Martín de Diego; E Padrón.



- 66** **Title of the work:** MARSDEN-WEINSTEIN REDUCTION THEOREM FOR SYMPLECTIC LIE ALGEBROIDS
Name of the conference: 21 INTERNATIONAL WORKSHOP ON DIFFERENTIAL GEOMETRICAL METHODS IN THEORETICAL MECHANICS
Type of participation: Participatory - invited/keynote talk
City of event: Madrid, Spain
Date of event: 2006
Organising entity: CSIC
- 67** **Title of the work:** NONHOLONOMIC LAGRANGIAN SYSTEMS ON LIE ALGEBROIDS
Name of the conference: NONHOLONOMIC SYSTEMS AND CONTROL
Type of participation: Participatory - invited/keynote talk
City of event: Varsovia, Poland
Date of event: 2006
Organising entity: Institute of Mathematics, Polish Academy of Sciences
- 68** **Title of the work:** HAMILTONIAN FORMALISM ON LIE AFFGEBROIDS: SOME ALTERNATIVE MODELS
Name of the conference: XIV FALL WORKSHOP ON GEOMETRY AND PHYSICS
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Bilbao, Spain
Date of event: 2005
Organising entity: University of Bilbao
Type of contribution: Scientific paper
J C Marrero; D Sosa. "HAMILTONIAN FORMALISM ON LIE AFFGEBROIDS: SOME ALTERNATIVE MODELS". En: PUBL. RSME. 10, pp. 211 - 217. 2006.
- 69** **Title of the work:** LIE ALGEBROIDS AND SOME APPLICATIONS TO MECHANICS
Name of the conference: XX INTERNATIONAL WORKSHOP ON DIFFERENTIAL GEOMETRIC METHODS IN THEORETICAL MECHANICS
Type of participation: Participatory - invited/keynote talk
City of event: Ghent, Belgium
Date of event: 2005
Organising entity: University of Ghent
- 70** **Title of the work:** COMPATIBILITY BETWEEN LIE AFFGEBROID AND AFFINE JACOBI STRUCTURES ON AN AFFINE BUNDLE
Name of the conference: XIII FALL WORKSHOP ON GEOMETRY AND PHYSICS
Type of event: Conference
Type of participation: 'Participatory - poster
City of event: Murcia, Spain
Date of event: 2004
Organising entity: University of Murcia
Type of contribution: Scientific paper
D Iglesias; J C Marrero; E Padrón; D Sosa. "COMPATIBILITY BETWEEN LIE AFFGEBROID AND AFFINE JACOBI STRUCTURES ON AN AFFINE BUNDLE". En: PUB. RSME. 9, pp. 227 - 232. 2005.
- 71** **Title of the work:** CONSTRAINT ALGORITHM FOR SINGULAR FIELD THEORIES
Name of the conference: XIII FALL WORKSHOP ON GEOMETRY AND PHYSICS
Type of event: Conference
Type of participation: 'Participatory - poster



City of event: Murcia, Spain

Date of event: 2004

Organising entity: University of Murcia

Type of contribution: Scientific paper

M de León; J Marín Solano; J C Marrero; M C Muñoz Lecanda; N Román Roy. "CONSTRAINT ALGORITHM FOR SINGULAR FIELD THEORIES". En: PUB. RSME. 9, pp. 233 - 239. 2005.

72 Title of the work: TULCZYJEV'S TRIPLE ASSOCIATED WITH A LIE AFFGEBROID AND A HAMILTONIAN SECTION

Name of the conference: XIII FALL WORKSHOP ON GEOMETRY AND PHYSICS

Type of event: Conference

Type of participation: Participatory - invited/keynote talk

City of event: Murcia, Spain

Date of event: 2004

Organising entity: University of Murcia

Type of contribution: Scientific paper

J C Marrero; D Sosa. "TULCZYJEV'S TRIPLE ASSOCIATED WITH A LIE AFFGEBROID AND A HAMILTONIAN SECTION". En: PUB. RSME. 9, pp. 66 - 79. 2005.

73 Title of the work: SOME BASIC RESULTS ON DIRAC MANIFOLDS

Name of the conference: XVIII INTERNATIONAL WORKSHOP ON DIFFERENTIAL GEOMETRIC METHODS IN THEORETICAL MECHANICS

Type of participation: Participatory - invited/keynote talk

City of event: Jaca, Zaragoza, Spain

Date of event: 2003

Organising entity: University of Zaragoza

74 Title of the work: ON LOCALLY CONFORMAL SYMPLECTIC GROUPOIDS

Name of the conference: XI FALL WORKSHOP ON GEOMETRY AND PHYSICS

Type of event: Conference

Type of participation: Participatory - invited/keynote talk

City of event: Oviedo, Spain

Date of event: 2002

Organising entity: University of Oviedo

Type of contribution: Scientific paper

D Iglesias; J C Marrero. "ON LOCALLY CONFORMAL SYMPLECTIC GROUPOIDS". En: PUBL. RSME. 6, pp. 93 - 102. 2004.

75 Title of the work: JACOBI MANIFOLDS AND AFFINE BUNDLES

Name of the conference: XVII INTERNATIONAL WORKSHOP ON DIFFERENTIAL GEOMETRIC METHODS IN THEORETICAL MECHANICS

Type of participation: Participatory - invited/keynote talk

City of event: Trento, Italy

Date of event: 2002

Organising entity: University of Trento

76 Title of the work: BIALGEBROIDES DE LIE Y ESTRUCTURAS DE POISSON Y JACOBI

Name of the conference: MINISIMPOSIO RECIENTES AVANCES EN ALGEBROIDES DE LIE

Type of participation: Participatory - invited/keynote talk

City of event: Pto. de la Cruz, Tenerife, Spain

Date of event: 2002



Organising entity: RSME

- 77** **Title of the work:** LIE BIALGEBRODS, DIRAC STRUCTURES AND COURANT ALGEBROIDS
Name of the conference: XVI INTERNATIONAL WORKSHOP ON DIFFERENTIAL GEOMETRIC METHODS IN THEORETICAL MECHANICS
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Bedlewo, Poland
Date of event: 2001
Organising entity: Institute of Mathematics, Polish Academy of Sciences
- 78** **Title of the work:** LIE ALGEBROIDS, JACOBI STRUCTURES, AND LIE GROUPOIDS
Name of the conference: IX FALL WORKSHOP ON GEOMETRY AND PHYSICS
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Vilanova de la Geltru, Spain
Date of event: 2000
Organising entity: Polytechnical University of Catalonia
Type of contribution: Scientific paper
D Iglesias; J C Marrero. "LIE ALGEBROIDS, JACOBI STRUCTURES, AND LIE GROUPOIDS". En: PUB. RSME. 3, pp. 89 - 106. 2001.
- 79** **Title of the work:** TRIANGULAR GENERALIZED LIE BIALGEBROIDS: HOMOLOGY AND COHOMOLOGY THEORIES
Name of the conference: WORKSHOP ON LIE ALGEBROIDS AND RELATED TOPICS IN DIFFERENTIAL GEOMETRY
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Varsovia, Poland
Date of event: 2000
Organising entity: Institute of Mathematics, Polish Academy of Sciences
Type of contribution: Scientific paper
D Iglesias; B López; J C Marrero; E Padrón. "TRIANGULAR GENERALIZED LIE BIALGEBROIDS: HOMOLOGY AND COHOMOLOGY THEORIES". En: BANACH CENTER PUB. 54, pp. 111 - 133. 2001.
- 80** **Title of the work:** JACOBI-NIJENHUIS MANIFOLDS
Name of the conference: VIII ENCUESTRO DE OTOÑO SOBRE GEOMETRÍA Y FÍSICA
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: Medina del Campo, Valladolid, Spain
Date of event: 1999
Organising entity: University of Valladolid
Type of contribution: Scientific paper
J C Marrero; J Monterde; E Padrón. "JACOBI-NIJENHUIS MANIFOLDS". En: PUB. RSME. 2, pp. 195 - 208. 2001.
- 81** **Title of the work:** THE GEOMETRY OF THE PHASE SPACE OF A NON HOLONOMIC MECHANICAL SYSTEM
Name of the conference: VII ENCUESTRO DE OTOÑO SOBRE GEOMETRÍA Y FÍSICA
Type of event: Conference
Type of participation: Participatory - invited/keynote talk



City of event: Valencia, Spain

Date of event: 1998

Organising entity: University of Valencia

Type of contribution: Scientific paper

M de León; J C Marrero; D Martín de Diego. "THE GEOMETRY OF THE PHASE SPACE OF A NON HOLONOMIC MECHANICAL SYSTEM". En: PUB. RSME. 1, pp. 107 - 118. 2001.

82 Title of the work: NAMBU-POISSON DYNAMICS

Name of the conference: 4TH MEETING ON CURRENT IDEAS IN MECHANICS AND RELATED FIELDS

Type of event: Conference

Type of participation: Participatory - oral communication

City of event: Krakow, Poland

Date of event: 1997

Type of contribution: Scientific paper

R Ibáñez; M de León; J C Marrero; D Martín de Diego. "NAMBU-POISSON DYNAMICS". En: ARCHIVES OF MECHANICS. 50 - 3, pp. 405 - 413. 1998.

83 Title of the work: REDUCTION OF NONHOLONOMIC MECHANICAL SYSTEMS WITH SYMMETRIES

Name of the conference: WORKSHOP ON NON-HOLONOMIC CONSTRAINTS IN DYNAMICS

Type of event: Conference

Type of participation: Participatory - invited/keynote talk

City of event: Calgary, Canada

Date of event: 1997

Organising entity: University of Calgary

Type of contribution: Scientific paper

F Cantrijn; M de León; J C Marrero; D Martín de Diego. "REDUCTION OF NONHOLONOMIC MECHANICAL SYSTEMS WITH SYMMETRIES". En: REP. MATH. PHYS.. 42, pp. 25 - 45. 1998.

84 Title of the work: SOME GENERALIZATIONS OF POISSON AND JACOBI STRUCTURES

Name of the conference: 1ST INTERNATIONAL MEETING ON GEOMETRY AND TOPOLOGY

Type of event: Conference

Type of participation: Participatory - oral communication

City of event: Braga, Portugal

Date of event: 1997

Organising entity: University of Minho

Type of contribution: Scientific paper

R Ibáñez; M de León; J C Marrero; D Martín de Diego; E Padrón. "SOME GENERALIZATIONS OF POISSON AND JACOBI STRUCTURES". En: PUBL. CENTRO DE MATEMÁTICA, UNIV. DO MINHO. pp. 119 - 130. 1998.

85 Title of the work: A DIRAC BRACKET FOR NON-HOLONOMIC LAGRANGIAN SYSTEMS

Name of the conference: V ENCUESTRO DE OTOÑO SOBRE GEOMETRÍA DIFERENCIAL Y APLICACIONES A FÍSICA MATEMÁTICA

Type of event: Conference

Type of participation: Participatory - invited/keynote talk

City of event: Jaca, Zaragoza, Spain

Date of event: 1996

Organising entity: University of Zaragoza

Type of contribution: Scientific paper

A Ibor; M de León; J C Marrero; D Martín de Diego. "A DIRAC BRACKET FOR NON-HOLONOMIC LAGRANGIAN SYSTEMS". En: MEMORIAS DE LA REAL ACADEMIA DE CIENCIAS EXACTAS, FÍSICAS Y NATURALES DE MADRID. 32, pp. 85 - 101. 1998.

86 Title of the work: A GENERALIZATION FOR JACOBI MANIFOLDS OF THE LICHNEROWICZ-POISSON COHOMOLOGY

Name of the conference: V ENCUENTRO DE OTOÑO SOBRE GEOMETRÍA DIFERENCIAL Y APLICACIONES A FÍSICA MATEMÁTICA

Type of event: Conference

Type of participation: Participatory - invited/keynote talk

City of event: Jaca, Zaragoza, Spain

Date of event: 1996

Organising entity: University of Zaragoza

Type of contribution: Scientific paper

M de León; J C Marrero; E Padrón. "A GENERALIZATION FOR JACOBI MANIFOLDS OF THE LICHNEROWICZ-POISSON COHOMOLOGY". En: MEMORIAS DE LA REAL ACADEMIA DE CIENCIAS EXACTAS, FÍSICAS Y NATURALES DE MADRID. 32, pp. 131 - 150. 1998.

87 Title of the work: TIME-DEPENDENT MECHANICAL SYSTEMS WITH NON-LINEAR CONSTRAINTS

Name of the conference: CONFERENCE OF DIFF. GEOMETRY

Type of event: Conference

Type of participation: Participatory - oral communication

City of event: Budapest, Hungary

Date of event: 1996

Type of contribution: Scientific paper

M de León; J C Marrero; D Martín de Diego. "TIME-DEPENDENT MECHANICAL SYSTEMS WITH NON-LINEAR CONSTRAINTS". En: NEW DEVELOPMENTS IN DIFFERENTIAL GEOMETRY. KLUWER ACADEM. PUBL.. pp. 221 - 234. 1999.

88 Title of the work: A GEOMETRICAL APPROACH TO CLASSICAL FIELD THEORIES: A CONSTRAINT ALGORITHM FOR SINGULAR THEORIES

Name of the conference: COLLOQUIUM ON DIFFERENTIAL GEOMETRY

Type of event: Conference

Type of participation: Participatory - oral communication

City of event: Debrecen, Hungary

Date of event: 1994

Organising entity: University of Debrecen

Type of contribution: Scientific paper

M de León; J Marín Solano; J C Marrero. "A GEOMETRICAL APPROACH TO CLASSICAL FIELD THEORIES: A CONSTRAINT ALGORITHM FOR SINGULAR THEORIES". En: NEW DEVELOPMENTS IN DIFFERENTIAL GEOMETRY. KLUWER ACADEM. PUBL.. pp. 291 - 312. 1996.

89 Title of the work: EHRESMANN CONNECTIONS IN CLASSICAL FIELD THEORIES

Name of the conference: III FALL WORKSHOP: DIFFERENTIAL GEOMETRY AND ITS APPLICATIONS

Type of event: Conference

Type of participation: Participatory - invited/keynote talk

City of event: Granada, Spain

Date of event: 1994

Organising entity: University of Granada

Type of contribution: Scientific paper

M de León; J Marín Solano; J C Marrero. "EHRESMANN CONNECTIONS IN CLASSICAL FIELD THEORIES". En: ANALES DE FÍSICA (MONOGRAFÍAS. 2, pp. 73 - 89. 1994.



- 90** **Title of the work:** ON A SPECIAL CLASS OF HERMITIAN MANIFOLDS
Name of the conference: DIFFERENTIAL GEOMETRY AND ITS APPLICATIONS
Type of event: Conference
Type of participation: 'Participatory - poster
City of event: OPAVA, Czech Republic
Date of event: 1992
Organising entity: Silesian University
Type of contribution: Scientific paper
J C Marrero; J Rocha. "ON A SPECIAL CLASS OF HERMITIAN MANIFOLDS". En: DIFFERENTIAL GEOMETRY AND ITS APPLICATIONS, PROC. OPAVA, SILESIA UNIVERSITY, OPAVA. pp. 377 - 386. 1993.
- 91** **Title of the work:** DEGENERATE TIME-DEPENDENT LAGRANGIANS OF SECOND ORDER: THE FOURTH ORDER DIFFERENTIAL EQUATION PROBLEM
Name of the conference: DIFFERENTIAL GEOMETRY AND ITS APPLICATIONS
Type of event: Conference
Type of participation: Participatory - oral communication
City of event: OPAVA, Czech Republic
Date of event: 1992
Organising entity: Silesian University
Type of contribution: Scientific paper
M de León; J C Marrero. "DEGENERATE TIME-DEPENDENT LAGRANGIANS OF SECOND ORDER: THE FOURTH ORDER DIFFERENTIAL EQUATION PROBLEM". En: DIFFERENTIAL GEOMETRY AND ITS APPLICATIONS, PROC. OPAVA, SILESIA UNIVERSITY, OPAVA. pp. 497 - 508. 1993.
- 92** **Title of the work:** TIME-DEPENDENT LINEAR LAGRANGIANS: THE INVERSE PROBLEM, SYMMETRIES AND CONSTANTS OF MOTION
Name of the conference: INTERNATIONAL SYMPOSIUM ON HAMILTONIAN SYSTEMS AND CELESTIAL MECHANICS
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: GUANAJUATO, Mexico
Date of event: 1991
Organising entity: UNAM
Type of contribution: Scientific paper
M de León; J C Marrero. "TIME-DEPENDENT LINEAR LAGRANGIANS: THE INVERSE PROBLEM, SYMMETRIES AND CONSTANTS OF MOTION". En: ADVANCES SERIES IN NONLINEAR DYNAMICS: HAMILTONIAN SYSTEMS AND CELESTIAL MECHANICS. 4, pp. 55 - 83. 1993.
- 93** **Title of the work:** CURVATURA ??SECCIONAL Y ?-SECCIONAL SOBRE UNA VARIEDAD LOCALMENTE CONFORME COSIMPLÉCTICA
Name of the conference: XV JORNADAS LUSO-ESPANHOLAS DE MATEMÁTICAS
Type of event: Conference
Type of participation: Participatory - oral communication
City of event: EVORA, Portugal
Date of event: 1990
Organising entity: University of Evora
Type of contribution: Scientific paper
D Chinea; J C Marrero. "CURVATURA ??SECCIONAL Y ?-SECCIONAL SOBRE UNA VARIEDAD LOCALMENTE CONFORME COSIMPLÉCTICA". En: ACTAS DE LAS XV JORNADAS LUSO-ESPANHOLAS DE MATEMÁTICAS. III, pp. 143 - 148. 1990.



- 94** **Title of the work:** THE CONSTRAINT ALGORITHM FOR DEGENERATE NON-AUTONOMOUS LAGRANGIAN SYSTEMS
Name of the conference: WORKSHOP RECENT TOPICS IN DIFFERENTIAL GEOMETRY
Type of event: Conference
Type of participation: Participatory - invited/keynote talk
City of event: PTO DE LA CRUZ, TENERIFE, Spain
Date of event: 1990
Organising entity: University of La Laguna
Type of contribution: Scientific paper
D Chinea; M de León; J C Marrero. "THE CONSTRAINT ALGORITHM FOR DEGENERATE NON-AUTONOMOUS LAGRANGIAN SYSTEMS". En: SECRET. PUBL. UNIV. LA LAGUNA, SERIES INFORMES. 32, pp. 13 - 29. 1991.
- 95** **Title of the work:** CONDICIONES GEOMÉTRICAS PARA QUE UNA VARIEDAD L.C.C. SEA COSIMPLÉCTICA
Name of the conference: XIV JORNADAS HISPANO-LUSAS DE MATEMÁTICAS
Type of event: Conference
Type of participation: Participatory - oral communication
City of event: PTO. DE LA CRUZ, TENERIFE, Spain
Date of event: 1989
Organising entity: Universidad of La Laguna
Type of contribution: Scientific paper
D Chinea; J C Marrero. "CONDICIONES GEOMÉTRICAS PARA QUE UNA VARIEDAD L.C.C. SEA COSIMPLÉCTICA". En: ACTAS XIV JORNADAS HISPANO-LUSAS DE MATEMÁTICAS, SECRET. PUBL. UNIV. LA LAGUNA. II, pp. 597 - 601.
- 96** **Title of the work:** SOBRE VARIEDADES TRANS-SASAKIANAS
Name of the conference: XIV JORNADAS HISPANO-LUSAS DE MATEMÁTICAS
Type of event: Conference
Type of participation: Participatory - oral communication
City of event: PTO. DE LA CRUZ, TENERIFE, Spain
Date of event: 1989
Organising entity: University of La Laguna
Type of contribution: Scientific paper
D Chinea; J C Marrero. "SOBRE VARIEDADES TRANS-SASAKIANAS". En: ACTAS XIV JORNADAS HISPANO-LUSAS DE MATEMÁTICAS, SECRET. PUBL. UNIV. LA LAGUNA. II, pp. 655 - 659. 1989.
- 97** **Title of the work:** CAMBIOS CONFORMES EN VARIEDADES CASI CONTACTO
Name of the conference: XIII JORNADAS HISPANO-LUSAS DE MATEMÁTICAS
City of event: Valladolid, Spain
Date of event: 1988
Organising entity: University of Valladolid
City organizing entity: Valladolid, Spain
D Chinea; J C Marrero.



Science Outreach activities

- 1** **Title of the work:** LAS MATEMATICAS DEL SISTEMA SOLAR
Name of the event: ¿QUE SABEMOS DE ...?
Date of event: 2009
Organising entity: CSIC y La Catarata
Type: Scientific book or monograph
M de León; J C Marrero; D Martín de Diego. "LAS MATEMATICAS DEL SISTEMA SOLAR". En: Los Libros de la Catarata, 3. 2009. ISBN 978-84-00-08823-1
- 2** **Title of the work:** GEOMETRIA SIMPLECTICA Y CIENCIA
Name of the event: UN PASEO POR LA GEOMETRIA 2001/02
Date of event: 2002
Organising entity: University of the Basque Country
J C Marrero. "GEOMETRIA SIMPLECTICA Y CIENCIA". En: Publicaciones del Departamento de Matemáticas de la Universidad del Pais Vasco. pp. 183 - 201.
- 3** **Title of the work:** GEOMETRIA SIMPLECTICA ¿SOLO UNA TEORIA MATEMATICA MAS?
Name of the event: LAS MATEMATICAS DEL SIGLO XX. UNA MIRADA EN 101 ARTICULOS
Date of event: 2000
Organising entity: Sociedad Canaria Isaac Newton de Profesores de Matemática, Nivola Libros y Ediciones S L
Type: Scientific paper
J C Marrero. "GEOMETRIA SIMPLECTICA ¿SOLO UNA TEORIA MATEMATICA MAS?". En: Números. 43/44, pp. 89 - 92. 2000.
- 4** **Title of the work:** LA LINEA RECTA ES EL CINCEL (SUPERFICIES REGLADAS)
Name of the event: FOTOGRAFIANDO LAS MATEMATICAS
Geographical area: Internacional
Date of event: 2000
Organising entity: Carrogio S A Ediciones
Type: Book chapter
J C Marrero. "LA LINEA RECTA ES EL CINCEL (SUPERFICIES REGLADAS)". En: Fotografiando las Matemáticas. Carrogio S.A. Ediciones, 2000. ISBN 978-84-7254-800-8

R&D management and participation in scientific committees

Scientific, technical and/or assessment committees

- 1** **Committee title:** Editorial Board of Journal of Geometric Mechanics”
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: American Institute of Mathematical Sciences
Start-End date: 2008 - 2022
- 2** **Committee title:** Editorial Board of Advances in Mathematical Physics”
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: Hindawi Publishing Corporation
Start-End date: 2008 - 2020
- 3** **Committee title:** Scientific Committee of the XIII International Summer School on Geometry, Mechanics and Control
Affiliation entity: INSTITUTO DE CIENCIAS MATEMATICAS
Type of entity: State agency
City affiliation entity: Madrid, Spain
Start date: 2019
- 4** **Committee title:** Scientific Committee of the XXVIII Fall Workshop on Geometry and Physics
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: INSTITUTO DE CIENCIAS MATEMATICAS
Type of entity: State agency
City affiliation entity: Madrid, Spain
Start date: 2019
- 5** **Committee title:** Scientific Committee of the Conference Classical and Quantum Physics: Geometry, Dynamics and Control (in honour to Prof A Ibort in his 60 birthday)
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: Institute of Mathematical Sciences (CSIC)
City affiliation entity: Madrid, Spain
Start date: 2018
- 6** **Committee title:** Scientific Committee of the VI Iberoamerican Meeting on Geometry, Mechanics and Control (A conference in honor of James Montaldi)
Affiliation entity: CIMAT
City affiliation entity: Guanajuato, Mexico
Start date: 2018
- 7** **Committee title:** Scientific Committee of the XII International Summer School on Geometry, Mechanics and Control
Affiliation entity: University of Santiago de Compostela
City affiliation entity: Santiago de Compostela, Spain



Start date: 2018

- 8** **Committee title:** Scientific Committee of the XXVII Fall Workshop on Geometry and Physics
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: University of Sevilla
City affiliation entity: Sevilla, Spain
Start date: 2018
- 9** **Committee title:** Chief-Editor of Revista of the Canary Royal Academy of Sciences”
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: Canary Royal Academy of Sciences
City affiliation entity: La Laguna, Spain
Start date: 2017
- 10** **Committee title:** Scientific Committee of the V Iberoamerican Meeting on Geometry, Mechanics and Control
Affiliation entity: University of La Laguna
City affiliation entity: La Laguna, Spain
Start date: 2017
- 11** **Committee title:** Scientific Committee of the XI International Summer School on Geometry, Mechanics and Control
Affiliation entity: Institute of Mathematical Sciences (CSIC)
City affiliation entity: Madrid, Spain
Start date: 2017
- 12** **Committee title:** Scientific Committee of the XXVI Fall Workshop on Geometry and Physics
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: University of Minho
City affiliation entity: Braga, Portugal
Start date: 2017
- 13** **Committee title:** Comité Científico del Scientific Committee of the XXV International Fall Workshop on Geometry and Physics
Affiliation entity: Institute of Mathematical Sciences and Institute for Structure of the Matter
City affiliation entity: Madrid, Spain
Start date: 2016
- 14** **Committee title:** Scientific Committee of the X International Summer School on Geometry, Mechanics and Control
Affiliation entity: Institute of Mathematical Sciences (CSIC)
City affiliation entity: Madrid, Spain
Start date: 2016
- 15** **Committee title:** Scientific Committee of the IX International Summer School on Geometry, Mechanics and Control
Affiliation entity: Institute of Mathematical Sciences (CSIC)
City affiliation entity: Madrid, Spain
Start date: 2015



- 16** **Committee title:** Scientific Committee of the XXIV International Fall Workshop on Geometry and Physics
Affiliation entity: Centro Universitario de la Defensa
City affiliation entity: Zaragoza, Spain
Start date: 2015
- 17** **Committee title:** Scientific Committee of the IV Iberoamerican Meeting on Geometry, Mechanics and Control
Affiliation entity: IMPA
City affiliation entity: Rio de Janeiro, Brazil
Start date: 2014
- 18** **Committee title:** Scientific Committee of the VIII International Summer School on Geometry, Mechanics and Control
Affiliation entity: Institute of Mathematical Sciences (CSIC)
City affiliation entity: Madrid, Spain
Start date: 2014
- 19** **Committee title:** Scientific Committee of the XXIII International Fall Workshop on Geometry and Physics
Affiliation entity: University of Granada
City affiliation entity: Granada, Spain
Start date: 2014
- 20** **Committee title:** Scientific Committee of the VII International Summer School on Geometry, Mechanics and Control
Affiliation entity: Institute of Mathematical Sciences
City affiliation entity: Madrid, Spain
Start date: 2013
- 21** **Committee title:** Scientific Committee of the XXII International Fall Workshop on Geometry and Physics
Affiliation entity: University of Evora
City affiliation entity: Evora, Portugal
Start date: 2013
- 22** **Committee title:** Scientific Committee of the III Iberoamerican Meeting on Geometry, Mechanics and Control
Affiliation entity: University of Salamanca
City affiliation entity: Salamanca, Spain
Start date: 2012
- 23** **Committee title:** Scientific Committee of the VI International Summer School on Geometry, Mechanics and Control
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: Institute of Mathematical Sciences
City affiliation entity: Madrid, Spain
Start date: 2012
- 24** **Committee title:** Scientific Committee of the XXI International Fall Workshop on Geometry and Physics
Affiliation entity: University of Burgos
City affiliation entity: Burgos, Spain



Start date: 2012

- 25** **Committee title:** Editorial Board of Revista de la Unión Matemática Argentina”
Primary (UNESCO code): 120000 - Mathematics
Affiliation entity: Unión Matemática Argentina
Start date: 2011
- 26** **Committee title:** Scientific Committee of the Second Iberoamerican Meeting on Geometry, Mechanics and Control”
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: University of Cuyo
City affiliation entity: Bariloche, Argentina
Start date: 2011
- 27** **Committee title:** Scientific Committee of the II Iberoamerican Meeting on Geometry, Mechanics and Control
Affiliation entity: Balseiro Atomic Center
City affiliation entity: Bariloche, Argentina
Start date: 2011
- 28** **Committee title:** Scientific Committee of the XX International Fall Workshop on Geometry and Physics
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: Institute of Mathematical Sciences (CSIC)
City affiliation entity: Madrid, Spain
Start date: 2011
- 29** **Committee title:** Scientific Committee of the XIX International Fall Workshop on Geometry and Physics
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: University of Oporto
City affiliation entity: Oporto, Portugal
Start date: 2010
- 30** **Committee title:** Guest Editor of the Special Issue of Discrete and Continuous Dynamical Systems - Series S on Nonholonomic Constraints in Mechanics and Optimal Control Theory, Vol. 3 (2010)
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: American Institute of Mathematical Sciences
Start date: 2010
- 31** **Committee title:** Scientific Committee of the Thematic Semester on Geometric Methods for Optimal Control”
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: CSIC, University of Santiago de Compostela and University of La Laguna
Start date: 2010
- 32** **Committee title:** Scientific Committee of the V International Summer School on Geometry, Mechanics and Control
Primary (UNESCO code): 120000 - Mathematics



Secondary (UNESCO code): 220000 - Physics
Affiliation entity: University of Santiago de Compostela
Start date: 2010

33 **Committee title:** Editorial Board of Extracta Mathematicae”
Primary (UNESCO code): 120000 - Mathematics
Affiliation entity: University of Extremadura
Start date: 2009

34 **Committee title:** Scientific Committee of the III International Summer School on Geometry, Mechanics and Control
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: Polytechnical University of Catalonia
Start date: 2009

35 **Committee title:** Scientific Committee of the XVIII International Workshop on Geometry and Physics
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: University of Zaragoza
Start date: 2009

36 **Committee title:** Scientific Committee of II International Summer School on Geometry, Mechanics and Control
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: University of La Laguna
Start date: 2008

37 **Committee title:** Scientific Committee of the First Iberoamerican Meeting on Geometry, Mechanics and Control”
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: University of Santiago de Compostela
Start date: 2008

38 **Committee title:** Scientific Committee of the I Iberoamerican Meeting on Geometry, Mechanics and Control
Affiliation entity: University of Santiago de Compostela
City affiliation entity: Santiago de Compostela, Spain
Start date: 2008

39 **Committee title:** Scientific Committee of the XVII International Workshop on Geometry and Physics
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: University of Cantabria
Start date: 2008

40 **Committee title:** Scientific Committee of the XXIIIrd International Workshop in Differential Geometric Methods in Theoretical Mechanics
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics



Affiliation entity: Institute of Mathematics, University of Debrecen

City affiliation entity: Debrecen, Hungary

Start date: 2008

- 41** **Committee title:** Guest Editor of a Special Issue of SIGMA, Vol. 3 which contains the Proceedings of the Workshop on Geometric Aspects of Integrable Systems (Julio 2006, University of Coimbra, Portugal)
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: University of Coimbra
City affiliation entity: Coimbra, Portugal
Start date: 2007
- 42** **Committee title:** Scientific Committee of I Summer School on Geometry, Mechanics and Control
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: Thematic Network on Geometry, Mechanics and Control
Start date: 2007
- 43** **Committee title:** Scientific Committee of XVI International Workshop on Geometry and Physics
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: Instituto Superior Técnico
City affiliation entity: Lisboa, Portugal
Start date: 2007
- 44** **Committee title:** Scientific Committee of the 22th International Workshop on Differential Geometric Methods in Theoretical Mechanics
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: Polish Academy of Sciences
Start date: 2007
- 45** **Committee title:** Advisory Panel of J. Phys. A:Mathematical and Theoretical
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: Institute of Physics
Start date: 2006
- 46** **Committee title:** Scientific Committee of the Workshop Geometric aspects of integrable systems
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: University of Coimbra
City affiliation entity: Coimbra, Portugal
Start date: 2006
- 47** **Committee title:** Scientific Committee of the XV Fall Workshop on Geometry and Physics
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: University of La Laguna
Start date: 2006



- 48** **Committee title:** Scientific Committee of XIV International Workshop on Geometry and Physics
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: University of the Basque Country
Start date: 2005
- 49** **Committee title:** Scientific Committee of 19th International Workshop on Differential Geometric Methods in Theoretical Mechanics
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: Institute of Mathematics, Polish Academy of Sciences
Start date: 2004
- 50** **Committee title:** Scientific Committee of XIII Fall Workshop on Geometry and Physics
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: University of Murcia
Start date: 2004
- 51** **Committee title:** Scientific Committee of XII International Workshop on Geometry and Physics
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: University of Coimbra
Start date: 2003
- 52** **Committee title:** Scientific Committee of XI International Workshop on Geometry and Physics
Primary (UNESCO code): 120000 - Mathematics
Secondary (UNESCO code): 220000 - Physics
Affiliation entity: University of Oviedo
Start date: 2002

Organization of R&D activities

- 1** **Title of the activity:** 15TH INTERNATIONAL WORKSHOP ON DIFFERENTIAL GEOMETRIC METHODS IN THEORETICAL MECHANICS
Type of activity: CONFERENCE
Convening entity: University of La Laguna
City convening entity: Santa Úrsula, Canary Islands, Spain
Start-End date: 20/08/2000 - 27/08/2000
- 2** **Title of the activity:** ICAMT-GMC SEMINAR: GEOMETRY, MECHANICS AND CONTROL
Type of activity: WEEKLY ONLINE SEMINAR **Geographical area:** International
Convening entity: Instituto de Ciencias Matemáticas
City convening entity: Madrid, Community of Madrid, Spain
Start date: 22/01/2021
- 3** **Title of the activity:** SEMINARIO DE ESPECIALIZACIÓN EN GEOMETRÍA Y TOPOLOGÍA
Type of activity: SPECIALIZATION SEMINAR **Geographical area:** Regional
Convening entity: Department of Mathematics, Statistics and Operational Research Investigación Operativa, University of La Laguna



City convening entity: La Laguna, Canary Islands, Spain

Start date: 2021

Duration: 1 year

4 Title of the activity: SEMINARIO DE ESPECIALIZACIÓN EN GEOMETRÍA Y TOPOLOGÍA

Type of activity: SPECIALIZATION SEMINAR

Geographical area: Regional

Convening entity: Department of Mathematics, Statistics and Operational Research Investigación Operativa, University of La Laguna

City convening entity: La Laguna, Canary Islands, Spain

Start date: 2019

Duration: 1 year

5 Title of the activity: SEMINARIO DE ESPECIALIZACIÓN EN GEOMETRÍA Y TOPOLOGÍA

Type of activity: SPECIALIZATION SEMINAR

Geographical area: Regional

Convening entity: Department of Mathematics, Statistics and Operational Research Investigación Operativa, University of La Laguna

City convening entity: La Laguna, Canary Islands, Spain

Start date: 2018

Duration: 1 year

6 Title of the activity: 11 INTERNATIONAL YOUNG RESEARCH ON GEOMETRY, MECHANICS AND CONTROL

Type of activity: WORKSHOP

Geographical area: Non EU International

Convening entity: University of La Laguna

City convening entity: La Laguna, Canary Islands, Spain

Start date: 2017

Duration: 5 days

7 Title of the activity: JORNADA MATEMATICA CON MOTIVO DEL 60 CUMPLEAÑOS DEL PROF. DOMINGO CHINEA

Type of activity: JORNADA

Geographical area: National

Convening entity: University of La Laguna

City convening entity: La Laguna, Canary Islands, Spain

Start date: 2017

Duration: 1 day

8 Title of the activity: SEMINARIO DE ESPECIALIZACIÓN EN GEOMETRÍA Y TOPOLOGÍA

Type of activity: SPECIALIZATION SEMINAR

Geographical area: Regional

Convening entity: Department of Mathematics, Statistics and Operational Research Investigación Operativa, University of La Laguna

City convening entity: La Laguna, Canary Islands, Spain

Start date: 2017

Duration: 1 year

9 Title of the activity: V IBEROAMERICAN MEETING ON GEOMETRY, MECHANICS AND CONTROL

Type of activity: WORKSHOP

Geographical area: Non EU International

Convening entity: University of La Laguna

City convening entity: La Laguna, Canary Islands, Spain

Start date: 2017

Duration: 5 days

10 Title of the activity: SEMINARIO DE ESPECIALIZACIÓN EN GEOMETRÍA Y TOPOLOGÍA

Type of activity: SPECIALIZATION SEMINAR

Geographical area: Regional

Convening entity: Department of Mathematics, Statistics and Operational Research, University of La Laguna

City convening entity: La Laguna, Canary Islands, Spain

Start date: 2016

Duration: 1 year



- 11 Title of the activity:** SEMINARIO DE ESPECIALIZACIÓN EN GEOMETRÍA Y TOPOLOGÍA
Type of activity: SPECIALIZATION SEMINAR **Geographical area:** Regional
Convening entity: Department of Mathematics, Statistics and Operational Research, University of La Laguna
City convening entity: La Laguna, Canary Islands, Spain
Start date: 2015 **Duration:** 1 year
- 12 Title of the activity:** SEMINARIO DE ESPECIALIZACIÓN EN GEOMETRÍA Y TOPOLOGÍA
Type of activity: SPECIALIZATION SEMINAR **Geographical area:** Regional
Convening entity: Department of Mathematics, Statistics and Operational Research, University of La Laguna
City convening entity: La Laguna, Canary Islands, Spain
Start date: 2014 **Duration:** 1 year
- 13 Title of the activity:** SEMINARIO DE ESPECIALIZACIÓN EN GEOMETRÍA Y TOPOLOGÍA
Type of activity: SPECIALIZATION SEMINAR **Geographical area:** Regional
Convening entity: Department of Mathematics, Statistics and Operational Research, University of La Laguna
City convening entity: La Laguna, Canary Islands, Spain
Start date: 2013 **Duration:** 1 year
- 14 Title of the activity:** SEMINARIO DE ESPECIALIZACIÓN EN GEOMETRÍA Y TOPOLOGÍA
Type of activity: SPECIALIZATION SEMINAR **Geographical area:** Regional
Convening entity: Department of Mathematics, Statistics and Operational Research, University of La Laguna
City convening entity: La Laguna, Canary Islands, Spain
Start date: 2012 **Duration:** 1 year
- 15 Title of the activity:** JORNADAS I-MATH: REDES TEMATICAS ESPAÑOLAS EN EL AMBITO DE LAS MATEMÁTICAS
Type of activity: JORNADAS **Geographical area:** National
Convening entity: I-MATH **Type of entity:** Proyecto Consolider
City convening entity: Castro-Urdiales, Cantabria, Spain
Start date: 09/2011
- 16 Title of the activity:** V INTERNATIONAL SUMMER SCHOOL ON GEOMETRY, MECHANICS AND CONTROL
Type of activity: TRAINING SCHOOL **Geographical area:** INTERNATIONAL
Convening entity: Thematic Network of Geometry, Mechanics and Control
City convening entity: La Cristalera, Madrid, Spain
Start date: 07/2011
- 17 Title of the activity:** II IBEROAMERICAN MEETING ON GEOMETRY, MECHANICS, AND CONTROL
Type of activity: CONFERENCE **Geographical area:** INTERNATIONAL
Convening entity: Balseiro Atomic Center
City convening entity: Bariloche, Argentina
Start date: 01/2011
- 18 Title of the activity:** SEMINARIO DE ESPECIALIZACIÓN EN GEOMETRÍA Y TOPOLOGÍA
Type of activity: SPECIALIZATION SEMINAR **Geographical area:** Regional
Convening entity: Department of Fundamental Mathematics, University of La Laguna



City convening entity: La Laguna, Canary Islands, Spain

Start date: 2011

Duration: 1 year

19 Title of the activity: V INTERNATIONAL YOUNG RESEARCHERS WORKSHOP ON GEOMETRY, MECHANICS, AND CONTROL

Type of activity: WORKSHOP

Geographical area: INTERNATIONAL

Convening entity: Thematic Network of Geometry, Mechanics and Control

Type of entity: Thematic Network

City convening entity: La Laguna, Canary Islands, Spain

Start date: 12/2010

20 Title of the activity: IV INTERNATIONAL SUMMER SCHOOL ON GEOMETRY, MECHANICS AND CONTROL

Type of activity: TRAINING SCHOOL

Geographical area: INTERNATIONAL

Convening entity: Thematic Network of Geometry, Mechanics and Control

City convening entity: Santiago de Compostela, Galicia, Spain

Start date: 07/2010

21 Title of the activity: SEMINARIO DE ESPECIALIZACIÓN EN GEOMETRÍA Y TOPOLOGÍA

Type of activity: SPECIALIZATION SEMINAR

Geographical area: Regional

Convening entity: Department of Fundamental Mathematics, University of La Laguna

City convening entity: La Laguna, Canary Islands, Spain

Start date: 2010

Duration: 1 year

22 Title of the activity: III INTERNATIONAL SUMMER SCHOOL ON GEOMETRY, MECHANICS AND CONTROL

Type of activity: TRAINING SCHOOL

Geographical area: INTERNATIONAL

Convening entity: Thematic Network of Geometry, Mechanics and Control

Type of entity: Thematic Network

City convening entity: L'Ametlla del Mar, Catalonia, Spain

Start date: 06/2009

23 Title of the activity: SEMINARIO DE ESPECIALIZACIÓN EN GEOMETRÍA Y TOPOLOGÍA

Type of activity: SPECIALIZATION SEMINAR

Geographical area: Regional

Convening entity: Department of Fundamental Mathematics, University of La Laguna

City convening entity: La Laguna, Canary Islands, Spain

Start date: 2009

Duration: 1 year

24 Title of the activity: ENCUENTRO IBEROAMERICANO SOBRE GEOMETRÍA DIFERENCIAL Y SUS APLICACIONES (CIMAC)

Type of activity: CONGRESO

Geographical area: INTERNATIONAL

Convening entity: CIMAC

Type of entity: Foundation

City convening entity: La Laguna

Start date: 06/2008

25 Title of the activity: FIRST IBEROAMERICAN MEETING ON GEOMETRY, MECHANICS AND CONTROL

Type of activity: CONFERENCE

Geographical area: INTERNATIONAL

Convening entity: Thematic Network on Geometry, Mechanics and Control

City convening entity: Santiago de Compostela, Galicia, Spain

Start date: 06/2008



- 26** **Title of the activity:** II INTERNATIONAL SUMMER SCHOOL ON GEOMETRY, MECHANICS AND CONTROL
Type of activity: TRAINING SCHOOL **Geographical area:** INTERNATIONAL
Convening entity: Thematic Network on Geometry, Mechanics and Control **Type of entity:** Thematic Network
City convening entity: Santa Cruz de La Palma, Canary Islands, Spain
Start date: 06/2008
- 27** **Title of the activity:** NONHOLONOMIC CONSTRAINTS IN MECHANICS AND OPTIMAL CONTROL THEORY
Type of activity: MINISIMPOSIUM EN THE 7 TH AIMS INTERNATIONAL CONFERENCE ON DYNAMICAL SYSTEMS, DIFFERENTIAL EQUATIONS AND APPLICATIONS **Geographical area:** INTERNATIONAL
Convening entity: American Institute of Mathematical Sciences
City convening entity: Arlington, Texas, United States of America
Start date: 05/2008
- 28** **Title of the activity:** JORNADAS DE MECÁNICA GEOMÉTRICA
Type of activity: JORNADAS **Geographical area:** INTERNATIONAL
Convening entity: University of La Laguna
City convening entity: La Laguna, Canary Islands, Spain
Start date: 04/2008
- 29** **Title of the activity:** PROGRAMA INTENSIVO DE INVESTIGACION MECANICA GEOMETRICA Y TEORIA DE CONTROL
Type of activity: RESEARCH SEMESTER **Geographical area:** INTERNATIONAL
Convening entity: Thematic Network on Geometry, Mechanics and Control **Type of entity:** Thematic Network
City convening entity: Zaragoza, Madrid, Sta. Cruz de La Palma (Tenerife), Spain
Start date: 2008 **Duration:** 6 months
- 30** **Title of the activity:** SPECIAL SESSION ON NEW GEOMETRICAL TOOLS IN MECHANICS
Type of activity: MINISIMPOSIUM IN THE XXII INTERNATIONAL WORKSHOP ON DIFFERENTIAL GEOMETRIC METHODS IN THEORETICAL MECHANICS **Geographical area:** INTERNACIONAL
Convening entity: Institute of Mathematics, Polish Academy of Sciences
City convening entity: Bedlewo, Poland
Start date: 09/2007
- 31** **Title of the activity:** I INTERNATIONAL SUMMER SCHOOL ON GEOMETRY, MECHANICS AND CONTROL
Type of activity: TRAINING SCHOOL **Geographical area:** INTERNATIONAL
Convening entity: Thematic Network on Geometry, Mechanics and Control **Type of entity:** Thematic Network
City convening entity: Castro-Urdiales, Cantabria, Spain
Start date: 06/2007
- 32** **Title of the activity:** SEMINARIO DE ESPECIALIZACIÓN EN GEOMETRÍA Y TOPOLOGÍA
Type of activity: SPECIALIZATION SEMINAR **Geographical area:** Regional
Convening entity: Department of Fundamental Mathematics, University of La Laguna



City convening entity: La Laguna, Canary Islands, Spain

Start date: 2007

Duration: 1 year

- 33** **Title of the activity:** XV INTERNATIONAL WORKSHOP ON GEOMETRY AND PHYSICS
Type of activity: A SATELLITE CONFERENCE OF ICM2006 **Geographical area:** INTERNATIONAL
Convening entity: University of La Laguna
City convening entity: Puerto de la Cruz, Canary Islands, Spain
Start date: 09/2006
- 34** **Title of the activity:** SEMINARIO DE ESPECIALIZACIÓN EN GEOMETRÍA Y TOPOLOGÍA
Type of activity: SPECIALIZATION SEMINAR **Geographical area:** Regional
Convening entity: Department of Fundamental Mathematics, University of La Laguna
City convening entity: La Laguna, Canary Islands, Spain
Start date: 2006 **Duration:** 1 year
- 35** **Title of the activity:** SPECIAL SESSION ON LIE ALGEBROIDS AND APPLICATIONS
Type of activity: MINISIMPOSIUM IN THE XX INTERNATIONAL WORKSHOP ON DIFFERENTIAL GEOMETRIC METHODS IN THEORETICAL MECHANICS **Geographical area:** INTERNATIONAL
Convening entity: University of Ghent
City convening entity: GHENT, Belgium
Start date: 09/2005
- 36** **Title of the activity:** JORNADAS DE GEOMETRÍA Y MECÁNICA
Type of activity: SCIENTIFIC DAYS **Geographical area:** National
Convening entity: University of La Laguna
City convening entity: La Laguna, Canary Islands, Spain
Start date: 10/2004
- 37** **Title of the activity:** SEMINARIO DE ESPECIALIZACIÓN EN GEOMETRÍA Y TOPOLOGÍA
Type of activity: SPECIALIZATION SEMINAR **Geographical area:** Regional
Convening entity: Department of Fundamental Mathematics, University of La Laguna
City convening entity: La Laguna, Canary Islands, Spain
Start date: 2004 **Duration:** 1 year
- 38** **Title of the activity:** SPECIAL SESSION ON JACOBI MANIFOLDS
Type of activity: MINISIMPOSIUM IN THE XVII INTERNATIONAL WORKSHOP ON DIFFERENTIAL GEOMETRIC METHODS IN THEORETICAL MECHANICS **Geographical area:** INTERNATIONAL
Convening entity: University of Trento
City convening entity: LEVICO TERME, Italy
Start date: 09/2002
- 39** **Title of the activity:** RECIENTES AVANCES EN ALGEBROIDES DE LIE
Type of activity: MINISIMPOSIUM IN THE CONFERENCE RSME2002 **Geographical area:** European Union
Convening entity: Royal Mathematical Spanish Society
City convening entity: Pto de la Cruz, Canary Islands, Spain
Start date: 30/01/2002 **Duration:** 1 day



- 40 Title of the activity:** SPECIAL SESSION ON MULTISYMPLECTIC GEOMETRY
Type of activity: MINISIMPOSIUM IN THE XV INTERNATIONAL WORKSHOP ON DIFFERENTIAL GEOMETRIC METHODS IN THEORETICAL MECHANICS
Geographical area: INTERNATIONAL
Convening entity: University of La Laguna
City convening entity: STA URSULA, Canary Islands, Spain
Start date: 2000 **Duration:** 7 days
- 41 Title of the activity:** SEMINARIO DE ESPECIALIZACIÓN EN GEOMETRÍA Y TOPOLOGÍA
Type of activity: SPECIALIZATION SEMINAR **Geographical area:** Regional
Convening entity: Department of Fundamental Mathematics, University of La Laguna
City convening entity: La Laguna
Start date: 1995 **Duration:** 1 year

Evaluation and revision of R&D projects and articles

- 1 Performed tasks:** EXTERNAL REFEREE OF RESEARCH PROJECTS OF THE UNIVERSITY OF LUXEMBOURG
- 2 Performed tasks:** REFEREE OF THE AGENCIA NACIONAL DE EVALUACION Y PROSPECTIVA (ANEP)
- 3 Performed tasks:** REFEREE OF THE AGENCIA ANDALUZA DE EVALUACION DE LA CALIDAD Y ACREDITACION UNIVERSITARIA
- 4 Performed tasks:** REFEREE OF THE AGENCIA NACIONAL DE PROMOCIÓN CIENTÍFICA Y TECNOLÓGICA DE ARGENTINA
- 5 Performed tasks:** REFEREE OF THE FOLLOWING SCIENTIFIC JOURNALS OR CONFERENCES: J Math Phys, Extracta Mathematicae, J Phys A: Math And Theoret, Reports on Math Phys, Advances in Computational Math, Central European J Math, J Algebra and its Applications, Note di Matematica, SIGMA, International Fall Workshop on Geometry and Physics (Congreso), Banach Center Publications (Congreso), Rev. Di Mat. Univ. Parma, Journal of Math. Anal. and Appl, Mathematical Proceedings of the Royal Irsih Academy, Differential Geometry and its Applications, Boletín de la Sociedad Matemática Mexicana, Journal of Geometric Mechanics, Physica Scripta, Geometriae Dedicata, Carpatian J Mathematics, Revista Matemática Complutense, Quaestiones Mathematicae, Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales: Serie A, Matemáticas, Abstract and Applied Analysis, Geometric and Functional Analysis, J Geom. Phys., Proceedings of the Royal Society of London, Serie A: Math Phys and Engineering, Mediterranean J Math, Annali di Matematica Pura ed Applicata, Applied Mathematical Letters, Nonlinearity, Discrete and Continuous Dynamical Systems: Series A, Journal of Symplectic Geometry, Pacific Journal of Mathematics, Forum of Mathematics: Sigma, Journal of Nonlinear Science, Journal of Geometric Analysis, Physica D: Nonlinear Phenomena, Archive for Rational Mechancis and Analysis, Annal Math Phys, Symmetry, Siam Journal on Applied and Dynamical Systems
- 6 Performed tasks:** REFEREE OF THE INTERNATIONAL FELLOWSHIP PROGRAMME IMPACT OF THE MATHEMATICAL INSTITUTE OF POLISH ACADEMY OF SCIENCES, WARSAW, POLAND

**7 Performed tasks:** REVIEWER OF PROJECTS OF THE PLAN GALLEGO DE I+D+I (INCITE)**Other achievements****Stays in public or private R&D centres**

- 1 Entity:** ICMAT
City of entity: Madrid, Spain
Start date: 2023 **Duration:** 18 days
Goals of the stay: Guest
Provable tasks: Research on non-holonomic Mechanics and Discrete Mechanics
- 2 Entity:** ICMAT
City of entity: Madrid, Spain
Start date: 2019 **Duration:** 10 days
Goals of the stay: Guest
Provable tasks: Research on non-holonomic Mechanics
- 3 Entity:** ICMAT
City of entity: Madrid, Spain
Start date: 2019 **Duration:** 10 days
Goals of the stay: Guest
Provable tasks: Research on non-holonomic Mechanics
- 4 Entity:** BALSEIRO ATOMIC CENTER
City of entity: S C de Bariloche, Argentina
Start date: 2017 **Duration:** 15 days
Goals of the stay: Guest
Provable tasks: Research on integrability of Hamiltonian systems on Poisson manifolds
- 5 Entity:** MATEMATISCHES INSTITUT DER LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN
City of entity: Munich, Germany
Start date: 2016 **Duration:** 5 days
Goals of the stay: Guest
Provable tasks: Research on locally conformal symplectic manifolds
- 6 Entity:** DEPARTMENT OF MATHEMATICS, UNIVERSITÀ DEGLI STUDI DI SALERNO
City of entity: Salerno, Italy
Start date: 2016 **Duration:** 4 days
Goals of the stay: Guest
Provable tasks: Research on almost Hermitian and almost contact manifolds
- 7 Entity:** UNIVERSITY OF COIMBRA
City of entity: Coimbra, Portugal
Start date: 2016 **Duration:** 5 days
Goals of the stay: Guest
Provable tasks: Research on almost Hermitian and almost contact manifolds



- 8** **Entity:** UNIVERSITY OF BURGOS
City of entity: Burgos, Spain
Start date: 2016 **Duration:** 5 days
Goals of the stay: Guest
Provable tasks: Research on Poisson-Lie groups and completely integrable systems
- 9** **Entity:** UNIVERSITY OF COIMBRA
City of entity: Coimbra, Portugal
Start date: 2015 **Duration:** 10 days
Goals of the stay: Guest
Provable tasks: Research on compact Vaisman and locally conformal symplectic manifolds
- 10** **Entity:** NATIONAL UNIVERSITY OF THE SOUTH
City of entity: Bahía Blanca, Argentina
Start date: 2014 **Duration:** 1 month - 30 days
Goals of the stay: Guest
Provable tasks: Research on Geometric Methods in Classical Mechanics and Classical Field Theories
- 11** **Entity:** NATIONAL INSTITUTE OF PURE AND APPLIED MATHEMATICS
City of entity: Rio de Janeiro, Brazil
Start date: 2014 **Duration:** 10 days
Goals of the stay: Guest
Provable tasks: Research on geometric formulation of non-holonomic mechanical systems and classical field theories
- 12** **Entity:** UNIVERSITY OF CALIFORNIA
City of entity: San Diego, United States of America
Start date: 2014 **Duration:** 1 month - 30 days
Goals of the stay: Guest
Provable tasks: Research on Classical Field Theories and Dynamical Systems
- 13** **Entity:** UNIVERSITY OF COIMBRA
City of entity: Coimbra, Portugal
Start date: 2013 **Duration:** 7 days
Goals of the stay: Guest
Provable tasks: Research on reduction of Poisson manifolds
- 14** **Entity:** POLYTECHNICAL UNIVERSITY OF CATALONIA
City of entity: Barcelona, Spain
Start date: 2013 **Duration:** 7 days
Goals of the stay: Guest
Provable tasks: Research on reduction of polysymplectic manifolds
- 15** **Entity:** UAM AND UNAM
City of entity: México D F, Mexico
Start date: 2012 **Duration:** 14 days
Goals of the stay: Guest
Provable tasks: Research on relative equilibria in the n-body problem on hyperbolic spaces



- 16** **Entity:** UNIVERSITY OF COIMBRA
City of entity: Coimbra, Portugal
Start date: 2012 **Duration:** 7 days
Goals of the stay: Guest
Provable tasks: Research on reduction of symplectic Lie algebroids
- 17** **Entity:** ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE
City of entity: Lausanne, Switzerland
Start date: 2010 **Duration:** 1 month
Goals of the stay: Guest
Provable tasks: Research on invariant measures in non-holonomic Mechanics
- 18** **Entity:** NATIONAL INSTITUTE ON PURE AND APPLIED MATHEMATICS
City of entity: Rio de Janeiro, Brazil
Start date: 2010 **Duration:** 1 month
Goals of the stay: Guest
Provable tasks: Research on non-holonomic completely integrable systems and Hamilton-Jacobi theory
- 19** **Entity:** ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE
City of entity: Lausanne, Switzerland
Start date: 2009 **Duration:** 7 days
Goals of the stay: Guest
Provable tasks: Research on invariant measures in non-holonomic Mechanics
- 20** **Entity:** NATIONAL INSTITUTE OF PURE AND APPLIED MATHEMATICS
City of entity: Rio de Janeiro, Brazil
Start date: 2009 **Duration:** 14 days
Goals of the stay: Guest
Provable tasks: Research on Hamilton-Jacobi theory and non-holonomic Mechanics
- 21** **Entity:** INSTITUTE OF MATHEMATICS (POLISH ACADEMY OF SCIENCES)
City of entity: Varsovia, Poland
Start date: 2009 **Duration:** 7 days
Goals of the stay: Guest
Provable tasks: Research on the geometry of constraints and Control
- 22** **Entity:** UNIVERSITY OF ZARAGOZA, IUMA
City of entity: Zaragoza, Spain
Start date: 2009 **Duration:** 2 months
Goals of the stay: Guest
Provable tasks: Research on Discrete Mechanics and Lie groupoids
- 23** **Entity:** INSTITUTE OF MATHEMATICS (POLISH ACADEMY OF SCIENCES)
City of entity: Varsovia, Poland
Start date: 2008 **Duration:** 7 days
Goals of the stay: Guest
Provable tasks: Investigación sobre la Geometría de las ligaduras y el Control



- 24** **Entity:** INSTITUTE OF MATHEMATICS AND FUNDAMENTAL PHYSICS, CSIC
City of entity: Madrid, Spain
Start date: 2007 **Duration:** 1 month
Goals of the stay: Guest
Provable tasks: Research on Geometric Mechanics and Lie algebroids

Prizes, mentions and distinctions

- 1** **Description:** FULL MEMBER OF THE CANARY ROYAL ACADEMY OF SCIENCES
Awarding entity: Canary Royal Academy of Sciences
Conferral date: 22/10/2014
- 2** **Description:** AWARD TO THE BEST GRADUATE STUDENT 1987
Awarding entity: University of La Laguna
Conferral date: 1987

Periods of research activity

- 1** **Nº of recognized periods:** 1
Certifying entity: NATIONAL COMMITTEE FOR THE EVALUATION OF THE RESEARCH ACTIVITY
Date of recognition: 2024
- 2** **Nº of recognized periods:** 1
Certifying entity: NATIONAL COMMITTEE FOR THE EVALUATION OF THE RESEARCH ACTIVITY
Date of recognition: 2018
- 3** **Nº of recognized periods:** 1
Certifying entity: NATIONAL COMMITTEE FOR THE EVALUATION OF THE RESEARCH ACTIVITY
Date of recognition: 2011
- 4** **Nº of recognized periods:** 1
Certifying entity: NATIONAL COMMITTEE FOR THE EVALUATION OF THE RESEARCH ACTIVITY
Date of recognition: 2005
- 5** **Nº of recognized periods:** 1
Certifying entity: NATIONAL COMMITTEE FOR THE EVALUATION OF THE RESEARCH ACTIVITY
Date of recognition: 1999
- 6** **Nº of recognized periods:** 1
Certifying entity: NATIONAL COMMITTEE FOR THE EVALUATION OF THE RESEARCH ACTIVITY
Date of recognition: 1993



Summary of other achievements

- 1** **Description of the achievement:** MINI-COURSE "GRUPOS DE LIE, FIBRACIONES Y CONEXIONES PRINCIPALES"
Accrediting entity: INSTITUTO ATOMICO BALSEIRO, UIVERSIDAD NACIONAL DE CUYO - C.N.E.A.
City accrediting entity: Bariloche, Argentina
Conferral date: 2023
- 2** **Description of the achievement:** MINI-COURSE "GEOMETRY AND DYNAMICS OF CONTACT MANIFOLDS" IN THE 13-TH INTERNATIONAL SUMMER SCHOOL ON GEOMETRY, MECHANICS AND CONTROL
Accrediting entity: INSTITUTO DE CIENCIAS MATEMATICAS
City accrediting entity: Madrid, Spain
Conferral date: 2019
Type of entity: State agency
- 3** **Description of the achievement:** ACADEMIC TUTOR IN THE INTERCAMPUS PROGRAM OF THE STUDENT MABEL NOEMI AVIO IPUCHE. PERIOD: ENERO 1996 - MARZO 1996
Accrediting entity: University of La Laguna
- 4** **Description of the achievement:** DIRECTOR OF FPU FELLOWSHIP OBTAINED BY D IGLESIAS PONTE. DURATION OF THE FELLOWSHIP: 2000-2003
Accrediting entity: University of La Laguna
- 5** **Description of the achievement:** DIRECTOR OF THE CAJA-CANARIAS FELLOWSHIP FOR POSTGRADUATE STUDENTS OBTAINED BY MONICA AYMERICH VALLS. DURATION OF THE FELLOWSHIP: FEBRUARY 2011 - FEBRUARY 2012
Accrediting entity: University of La Laguna
- 6** **Description of the achievement:** DIRECTOR OF THE FELLOWSHIP AWARDED BY THE CAJA-CANARIAS FOUNDATION FOR POSTGRADUATE STUDENTS OBTAINED BY DANIEL RODRIGUEZ DIAZ. DURATION OF THE FELLOWSHIP: JANUARY 2014 - JANUARY 2015
Accrediting entity: University of La Laguna
- 7** **Description of the achievement:** DIRECTOR OF THE JAE-PREDOCTORAL FELLOWSHIP (CSIC) OBTAINED BY ELISA LAVINIA GUZMAN ALONSO. DURATION OF THE FELLOWSHIP: SEPTEMBER 2009 - SEPTEMBER 2013
Accrediting entity: University of La Laguna
- 8** **Description of the achievement:** MASTER COURSE ON LIE ALGEBROIDS AND GROUPOIDS IN CLASSICAL MECHANICS. DATE: 11/2014
Accrediting entity: National University of the South
City accrediting entity: Bahia Blanca, Argentina
- 9** **Description of the achievement:** TEACHING MASTER COURSE ON GEOMETRY OF MANIFOLDS IN THE INTERUNIVERSITY MASTER MODELIZACION E INVESTIGACION MATEMATICA, ESTADISTICA Y COMPUTACION. DATE: 03/2014, 03/2015, 04/2016, 04/2017 AND 03/2018
Accrediting entity: University of La Laguna, La Rioja, Oviedo, Basque Country, Zaragoza and Public University of Navarra



10 **Description of the achievement:** TEACHING POSTGRADUATE COURSE ON THE RIGID BODY AND THE LIE-POISSON REDUCTION THEOREM IN THE DOCTORAL PROGRAM APPLIED MATHEMATICS.
DATE: 07/2004

Accrediting entity: Polytechnical University of Catalonia

11 **Description of the achievement:** TEACHING POSTGRADUATE COURSES ON GEOMETRIC MECHANICS DURING THE COURSES 2008/09, 2009/10 AND 2010/11 IN THE OFICIAL MASTER MATEMATICA AVANZADA: APLICACIONES Y EDUCACION

Accrediting entity: University of La Laguna

12 **Description of the achievement:** TEACHING POSTGRADUATES COURSES FROM 1991 UNTIL 2008

Accrediting entity: University of La Laguna