

## Articole in extenso, publicate în reviste din fluxul științific internațional principal

### *Publications in Refereed Journals*

1. *General-relativistic resistive-magnetohydrodynamic simulations of binary neutron stars*, K. Dionysopoulou, **D. Alic**, L. Rezzolla, Physical Review D 92, 084064, (2015) DOI:10.1103/PhysRevD.92.084064 WOS:000363793400003 (2015, IF 4,880 Q1)
2. *Error-analysis and comparison to analytical models of numerical waveforms produced by the NRAR Collaboration*, Hinder, A. Buonanno, **D. Alic** et al. Class. Quantum Grav. 31, 025012. (2014), DOI:10.1088/0264-9381/31/2/025012 WOS:000329984900013 (2014 IF 3,432 Q2)
3. *Constraint damping of the conformal and covariant formulation of the Z4 system in simulations of binary neutron stars*, **D. Alic**, W. Kastaun, L. Rezzolla, Physical Review D 88, 064049, (2013) DOI: 10.1103/PhysRevD.88.064049 WOS:000324760500007 (2013 IF 5,340 Q1)
4. *General-relativistic resistive magnetohydrodynamics in three dimensions: Formulation and tests*, K. Dionysopoulou, **D. Alic**, C. Palenzuela, L. Rezzolla, B. Giacomazzo, Physical Review D 88, 044020, (2013) DOI:10.1103/PhysRevD.88.044020 WOS:000322903600004 (2013 IF 5,340 Q1)
5. *Black hole from merging binary neutron stars: How fast can it spin?*, W. Kastaun, F. Galeazzi, **D. Alic**, L. Rezzolla, T. Font, Physical Review D 88, 021501 - Rapid Communications. (2013) DOI:10.1103/PhysRevD.88.021501 WOS:000321208300001 (2013 IF 5,340 Q1)
6. *Dynamical evolution of fermion-boson stars*, S. Valdez-Alvarado, C. Palenzuela, **D. Alic**, L. A. Urena-Lopez, Physical Review D 87, 084040. (2013) DOI:10.1103/PhysRevD.87.084040 WOS:000317828700003 (2013 IF 5,340 Q1)
7. *NR/HEP: roadmap for the future*, V. Cardoso, L. Gualtieri, C. Herdeiro, U. Sperhake, **D. Alic**, et al. Classical and Quantum Gravity 29, 244001. (2012) DOI:10.1088/0264-9381/29/24/244001 WOS:000312490900004 (2012 IF 3,647 Q2)
8. *General relativistic radiation hydrodynamics of accretion flows: II. Treating stiff source terms and exploring physical limitations*, C. Roedig, O. Zanotti, **D. Alic**. Monthly Notices of the Royal Astronomical Society, 426, 2, pp. 1613-1631. (2012), DOI:10.1111/j.1365-2966.2012.21821.x WOS:000309456200063 (2012 IF 5.521 Q1)
9. *Accurate Simulations of Binary Black-Hole Mergers in Force-Free Electrodynamics*, **D. Alic**, P. Moesta, L. Rezzolla, O. Zanotti, J. L. Jaramillo, Astrophysical Journal, 754, 36. (2012) DOI:10.1088/0004-637X/754/1/36 WOS:000306111800036 (2012 IF 6.532 Q1)
10. *On the detectability of dual jets from binary black holes*, P. Moesta, **D. Alic**, L. Rezzolla, O. Zanotti, C. Palenzuela, Astrophysical Journal Letters, 749, L32. (2012) DOI:10.1088/2041-8205/749/2/L32 WOS:000302638300016 (2012 IF 6.835 Q1)
11. *Conformal and covariant formulation of the Z4 system with constraint-violation damping*, **D. Alic**, C. Bona-Casas, C. Bona, L. Rezzolla, C. Palenzuela, Physical Review D 85, 064040, (2012) DOI:10.1103/PhysRevD.85.064040 WOS:000301973600006 (2012 IF 5,132 Q1)
12. *Dynamical damping terms for symmetry-seeking shift conditions*, **D. Alic**, L. Rezzolla, I. Hinder, P. Moesta, Classical and Quantum Gravity 27, 245023. (2010) DOI: 10.1088/0264-9381/27/24/245023 WOS:000284829400023 (2010 IF 3,153 Q2)
13. *Multi-state Boson Stars*, A. Bernal, J. Barranco, **D. Alic**, C. Palenzuela, Physical Review D 81, 044031, (2010) DOI:10.1103/PhysRevD.81.044031 WOS:000275898500081 (2010 IF 5,379 Q1)
14. *Towards a gauge-polyvalent Numerical Relativity code*, **D. Alic**, C. Bona, C. Bona-Casas Physical Review D 79, 044026, (2009) DOI:10.1103/PhysRevD.79.044026 WOS:000263816800077 (2009 IF 5,292 Q1)
15. *Implementation of standard testbeds for numerical relativity*, M.C. Babuic, S. Husa, **D. Alic**, et al. Classical and Quantum Gravity 25, 125012, (2008) DOI:10.1088/0264-9381/25/12/125012 WOS:000256841200012 (2008 IF 3,149 Q2)
16. *Efficient implementation of finite volume methods in Numerical Relativity*, **D. Alic**, C. Bona, C. Bona Casas, J. Masso, Physical Review D 76, 104007, (2007). DOI:10.1103/PhysRevD.76.104007 WOS:000251327400052 (2007 IF 4,984 Q1)

## Publicații in extenso în lucrări ale conferințelor internaționale de specialitate

### Articole Web of Science Conference Proceedings Citation Index

*Evolution of boson-fermion stars*, S. Valdez-Alvarado; C. Palenzuela; **D. Alic**; Ureña-López L Arturo; Becerril Ricardo, AIP/American Institute of Physics Conference Proceedings. (2012) DOI 10.1063/1.4748532, WOS:000309527200004

*Galactic dark matter halo made of spin-zero bosons*, A. Bernal, J. Barranco, **D. Alic**, C. Palenzuela, published in *AIP Conf. Proc.* 1241:335-342. (2010), Proceedings of the Conference Invisible Universe, ISBN 978-0-7354-0789-3/10; Vol.1241. DOI: 10.1063/1.3462653, WOS:000317572200020

*Gauge and constraint degrees of freedom: from analytical to numerical approximations in General Relativity*, **D. Alic**, C. Bona, published in *Proceedings of Spanish Relativity Meeting - Encuentros Relativistas Espanoles ERE2007, "Relativistic Astrophysics and Cosmology"*, EAS Publications Series 30. (2008) DOI: 10.1051/eas:0830006, WOS:000262047700006

*A new dissipation term for finite difference simulations in Relativity*, **D. Alic**, C. Bona, C. Bona Casas, published in *Proceedings of Spanish Relativity Meeting - Encuentros Relativistas Espanoles ERE2007, "Relativistic Astrophysics and Cosmology"*, EAS Publications Series 30. (2008) DOI:10.1051/eas:0830029 WOS:000262047700029

### Articole în Conference Proceedings cu ISBN

*From Tensor Equations to Numerical Code – Computer Algebra Tools, for Numerical Relativity*, C. Lechner, **D. Alic**, S. Husa, published in *Proceedings of the 6th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing SYNASC04, Timișoara, (2004)* Editura Mirton, ISBN 973-661-441-7, <https://doi.org/10.48550/arXiv.cs/0411063>

Liste ale publicațiilor în *Refereed Journals și volume Conference Proceedings* pot fi găsite pe :

- Serverul SAO/NASA Astrophysics Data System (ADS), <https://ui.adsabs.harvard.edu/public-libraries/64nh3ydURmuwvR275tEbFg>, care raportează 28 publicații, peste 950 de citări și un h-index: 14.
- Google Scholar, peste 1000 de citări și un h-index: 16; <https://scholar.google.com/citations?hl=ro&user=2uKgeGwAAAAJ>
- Scopus, 880 de citări, h-index: 15, <https://www.scopus.com/authid/detail.uri?authorId=25222848700> ;
- Web of Sciences, peste 870 de citări, h-index: 15, WoS Researcher ID: EKI-1785-2022 <https://www.webofscience.com/wos/author/record/18962178>
- Max Planck Institute for Gravitational Physics, Max Planck Society; Researcher Portfolio Alic Daniela; Researcher Profile: Position Astrophysical Relativity, AEI-Golm, MPI for Gravitational, Researcher ID <https://pure.mpg.de/cone/persons/resource/persons2709>

### Teza de doctorat

**Alic D., Theoretical issues in Numerical Relativity simulations**, University of the Balearic Islands, Departamento de Física Spain, ISBN 978-84-692-6462-1, <http://www.tdx.cat/TDX-0923109-130054>, (2009). Domeniul de doctorat/Specializarea: Fizică.

*Development of a formulation of the Einstein equations with evolved constraint equations and special gauge-conditions; adapting and implementing numerical algorithms for the numerical simulation of black holes and boson stars (mixed scalar field models for dark matter) used in the study of the rotation curves of galaxies.*

Diploma Doctor Fizica/Doctora por la Universitat de les Illes Balears, cu calificativul *excellent cum laude*, Seria 2-AA-730253 nr.2009154606/0010/31751/22.09.2009

Diploma Doctor European/Menció de Doctora Europea, Seria I-B-0007 Nr. 1-4-54/30.09.2009.

Atestat de recunoaștere Diploma și Titlul de Doctor Germania / KMK- Zentralstelle für ausländisches Bildungswesen, Zeugnisbeurteilung für ausländische Hochschulqualifikationen Reg.-Nr. L2015/56310, Bonn, 14.09.2015

Atestat de recunoaștere Diploma și Titlul de Doctor MEC/CNRED, Nr. 85460/A.N./28.11.2019

## **Lucrări/proiecte de finalizare a studiilor de masterat și studiilor avansate**

### **Master (2)**

Alic, D., *Analiză și studiu de proiectare a structurii de rezistență pentru portale de susținere a echipamentelor destinate semnalizării, informării și monitorizării traficului rutier pe autostrăzi.*

Universitatea Politehnica Timișoara, Facultatea de Inginerie Hunedoara, Romania,

Specializarea/Program de studii : Ingineria și Managementul Sistemelor Mecanice (2022)

### **Studii postuniversitare. Management, Marketing și Resurse Umane**

Alic, D., *Dezvoltarea Resurselor Umane prin implementarea programelor în sistem de formare profesională continuă. Centrul Intern de Formare Profesională.*

Universitatea Politehnica Timișoara, Centrul de studii Postuniversitare/Facultatea de Inginerie Hunedoara, Romania (2019)

### **Studii Avansate / Estudios Avanzados**

Alic, D., *Robust numerical Relativity Codes and Black Hole Simulations.*

Memoria de investigacion, Departamento de Fisica, University of the Balearic Islands, Spain (2008).

### **Master (1)**

Alic, D. *Toward the Numerical Implementation of Well-Posed, Constraint Preserving Evolution Systems for General Relativity*, West University of Timisoara, Romania. (2005)

Numerical implementation of tensor rules in Mathematica plus MathTensor for a formulation of the Einstein equations based on tetrads; testing the resulting C code in various astrophysical scenarios.

### **Licență**

Alic, D., *The Post-Newtonian Approximation with applications in Numerical Relativity*, West University Timisoara, Romania. (2003)

A code in MAPLE plus GRTensor for approximate solutions of the Einstein equations in weak gravitational fields.

## **Produse, tehnologii, platforme și servicii inovative**

Denumire produs / descriere sintetică	Anul validării/mod validare	Calitatea în echipă	Număr contributori
<p><b>The Einstein Toolkit</b> - software platform/open-source cyberinfrastructure ecosystem, providing computational tools supporting research in computational astrophysics, gravitational physics, and fundamental science.</p> <p><a href="https://doi.org/10.5281/zenodo.3866075">https://doi.org/10.5281/zenodo.3866075</a> ; <a href="http://einsteintoolkit.org/">http://einsteintoolkit.org/</a>; <a href="http://einsteintoolkit.org/documentation.html">http://einsteintoolkit.org/documentation.html</a>; <a href="https://docs.einsteintoolkit.org/et-docs/Main_Page">https://docs.einsteintoolkit.org/et-docs/Main_Page</a>; <a href="https://zenodo.org/communities/einsteintoolkit/?page=1&amp;size=20">https://zenodo.org/communities/einsteintoolkit/?page=1&amp;size=20</a>; <a href="https://zenodo.org/communities/inspire/?page=1&amp;size=20">https://zenodo.org/communities/inspire/?page=1&amp;size=20</a>;</p> <p>(Zenodo: part of OpenAIRE ("Open Access Infrastructure for Research in Europe"))</p>	Din 2017, sub denumirea <i>Einstein Toolkit</i> (anterior, <i>Cactus Computational Toolkit</i> <a href="http://www.cactuscode.org/index.html">http://www.cactuscode.org/index.html</a> ; <a href="https://swmath.org/software/4422?page=2">https://swmath.org/software/4422?page=2</a> )	Membru	93

Publicații (extras):

- Haas, Roland; Cheng, Cheng-Hsin; Diener, Peter; Etienne, Zachariah; Ficarra, Giuseppe; Ikeda, Taishi; Kalyanaraman, Hrishikesh; Kuo, Nadine; Leung, Lisa; Tian, Chi; Bing-Jyun Tsao; Wen, Allen; Alcubierre, Miguel; **Alic, Daniela**; Allen, Gabrielle; Ansorg, Marcus; Babiuc-Hamilton, Maria; Baiotti, Luca; Benger, Werner; et all. *The Einstein Toolkit*, <https://doi.org/10.5281/zenodo.7245853> (2022)
- Etienne, Zachariah; Brandt, Steven R; Diener, Peter; Gabella, William E; Gracia-Linares, Miguel; Haas, Roland; Kedia, Atul; Alcubierre, Miguel; **Alic, Daniela**; Allen, Gabrielle; Ansorg, Marcus; Babiuc-Hamilton, Maria; et all. *The Einstein Toolkit*, <http://dx.doi.org/10.5281/ZENODO.4884780> (2021)
- Haas, Roland; Brandt, Steven R; Gabella, William E; Gracia-Linares, Miguel; Karakas, Beyhan; Matur, Rahime; Alcubierre, Miguel; **Alic, Daniela**; Allen, Gabrielle; Ansorg, Marcus; Babiuc-Hamilton, Maria; Baiotti, Luca; et all. *The Einstein Toolkit*, <http://dx.doi.org/10.5281/ZENODO.4298887> (2020)
- Brandt, Steven R; Brendal, Brockton; Gabella, William E; Haas, Roland; Karakas, Beyhan; Rosofsky, Shawn G; Schaffarczyk, Alois Peter; Alcubierre, Miguel; **Alic, Daniela**; Allen, Gabrielle; Ansorg, Marcus; Babiuc-Hamilton, Maria; et all. *The Einstein Toolkit*, <http://dx.doi.org/10.5281/ZENODO.3866075> (2020)
- Babiuc-Hamilton, Maria; Brandt, Steven R; Diener, Peter; Elley, Matthew; Etienne, Zachariah; Ficarra, Giuseppe; Haas, Roland; Witek, Helvi; Alcubierre, Miguel; **Alic, Daniela**; Allen, Gabrielle; Ansorg, Marcus; Baiotti, Luca; Benger, Werner; et all. *The Einstein Toolkit*, <http://dx.doi.org/10.5281/ZENODO.3522086> (2019)

## Granturi/proiecte naționale și internaționale

Nr crt	Tip proiect/grant	Titlu și identificator proiect/grant, Finanțator, Volumul finanțării, Perioadă de derulare	Director proiect/grant Calitatea în echipă
1.	Ministerio de Ciencia y Tecnología, Spain. <i>Plan Nacional de Física de Partículas y Aceleradores</i>	<b>Fuentes de Ondas Gravitacionales, FPA-2004-03666</b> Grants Spanish Ministerio de Ciencia e Innovación / Universitat de les Illes Balears. 2004-2007 <a href="http://grg.uib.es/grants/index.php">http://grg.uib.es/grants/index.php</a> ; <a href="https://www.uib.cat/digitalAssets/141/141924_cat_proj_04.pdf">https://www.uib.cat/digitalAssets/141/141924_cat_proj_04.pdf</a> , pp.181	-Prof. Dr. Carles Bona Garcia, Univ. de les Illes Balears, Spain <a href="http://grg.uib.es/people/index.php">http://grg.uib.es/people/index.php</a> -Membru <a href="http://grg.uib.es/people/index.php">http://grg.uib.es/people/index.php</a>
2.	Ministerio de Educacion y Ciencia <i>Programa de Becas Predoctorales de Formacion de Personal Investigador (FPI)</i>	<b>Beca Predoctoral de Formacion de Personal Investigador, FPI BES-2005-10633</b> Grant Ministerio de Educacion y Ciencia, 2005-2009 <a href="https://www.boe.es/diario_boe/txt.php?id=BOE-A-2005-14383">https://www.boe.es/diario_boe/txt.php?id=BOE-A-2005-14383</a>	-Prof. Dr. Carles Bona Garcia, Univ.de les Illes Balears, Spain <a href="http://grg.uib.es/people/index.php">http://grg.uib.es/people/index.php</a> -Titular grant cercetare, <a href="https://www.boe.es/boe/dias/2005/08/22/pdfs/A29170-29194.pdf">https://www.boe.es/boe/dias/2005/08/22/pdfs/A29170-29194.pdf</a> , pp.2
3.	Ministerio d'Educació i Ciència, Spain. <i>Programa nacional de física de partícules.</i>	<b>Detección de ondas gravitacionales: algoritmos de análisis de datos, agujeros negros binarios y materia oscura en Galaxias, FPA-2007-60220</b> Grants Spanish Ministerio de Ciencia e Innovación / Universitat de les Illes Balears 2007-2010 <a href="http://grg.uib.es/grants/index.php">http://grg.uib.es/grants/index.php</a> ; <a href="https://www.uib.cat/digitalAssets/141/141921_catproj07.pdf">https://www.uib.cat/digitalAssets/141/141921_catproj07.pdf</a> , pp.151	Prof. Dr. Carles Bona Garcia, Universitat de les Illes Balears, Spain <a href="http://grg.uib.es/people/index.php">http://grg.uib.es/people/index.php</a> Membrii echipei: <a href="https://www.uib.cat/digitalAssets/141/141921_catproj07.pdf">https://www.uib.cat/digitalAssets/141/141921_catproj07.pdf</a> pp.151, <a href="http://grg.uib.es/people/index.php">http://grg.uib.es/people/index.php</a>
4.	<b>German Research Foundation (DFG), CRC/Transregios Programme, TRR 7: Gravitational Wave Astronomy /</b>  Project description: <a href="https://gepris.dfg.de/gepris/projekt/5485423">https://gepris.dfg.de/gepris/projekt/5485423</a>  <a href="https://gepris.dfg.de/gepris/projekt/190072801?language=en">https://gepris.dfg.de/gepris/projekt/190072801?language=en</a>	<b>Electromagnetic Counterparts to Supermassive Binary Black Hole Mergers (B10); Project ID: (DFG) 5485423; Grant on SFB-TRR 7- Gravitational Wave Astronomy , Deutsche Forschungsgemeinschaft/DFG, CRC/Transregios Programme, TRR 7: Gravitationswellenastronomie Methoden - Quellen – Beobachtungen</b> 2011-2014 <b>Applicant Institution:</b> Friedrich-Schiller-Universität Jena; <b>Co-Applicant:</b> Institution Max-Planck-Institut für Gravitationsphysik / Albert-Einstein-Institut; <b>Project Heads:</b> Prof. Dr. Pau Amaro Seoane; Prof. Dr. Luciano Rezzolla	Prof. Dr. Rezzolla Luciano, Goethe-Universität Frankfurt am Main, Institut für Theoretische Physik, Germany <a href="http://astro.uni-frankfurt.de/relastro/">http://astro.uni-frankfurt.de/relastro/</a> <a href="https://itp.uni-frankfurt.de/~rezzolla/CV/rezzolla_cv.pdf">https://itp.uni-frankfurt.de/~rezzolla/CV/rezzolla_cv.pdf</a> , (pp5) Membru <a href="http://astro-gr.org/past-members">http://astro-gr.org/past-members</a> <a href="https://hyperspace.uni-frankfurt.de/grg-scientists/">https://hyperspace.uni-frankfurt.de/grg-scientists/</a>
5..	<b>POCU/90/6.13/6.14/1 07330.</b> Cofinanțat din F.S.E. prin Programul Operațional Capital Uman, 2014-2020, Axa priorităță 6, Educație și competențe.	<b>Construiește-ți viitorul prin stagii de practică! – CONPrACT</b> Beneficiar UNIV. POLITEHNICA TIMIȘOARA ID proiect: 107330; Contract: 67070/DGPECU/12.09.2018 12/09/2018–12/12/ 2020 (Fac. de Ing. din Hunedoara; Fac. de Chimie Ind. și Ing.Med.; Fac. de C-ții). - Partener: DANKE CONSULTING SRL	Luisa Isabela DUNGAN, Universitatea Politehnica Timișoara Membru <a href="https://www.research.upt.ro/page231.html">https://www.research.upt.ro/page231.html</a>

## Activitatea științifică

### Participări la Conferințe și Workshops ( \*: contributed talks)

Nr. Crt.	Denumire Conferință / Workshop. Perioada	Prezentarea susținută/ Talk/ Prelegeri expuse*
1.	ICAS 2022 - International Conference on Applied Sciences, Banja Luka, Bosnia and Herzegovina, 25-28.05.2022	<i>Design and optimization study of a resistance structure for an industrial storage platform supporting injection molding tools for the automotive industry*</i> <a href="http://icas.science/forms/Program_ICAS2022.pdf">http://icas.science/forms/Program_ICAS2022.pdf</a> pp.19, <a href="https://www.researchgate.net/publication/361073268_ICAS_2022_BOOK_OF_ABSTRACTS">https://www.researchgate.net/publication/361073268_ICAS_2022_BOOK_OF_ABSTRACTS</a> ; (in curs de publicare)
2.	Astro-GR Conference, Atlanta, USA, 18-22.11.2013	<i>Magnetic fields in relativistic compact-object binaries: Binary Black Hole mergers in Force-Free electrodynamics*</i> <a href="http://astro-gr.org/astro-gr-atlanta-2013-formation-growth-interaction-black-holes/">http://astro-gr.org/astro-gr-atlanta-2013-formation-growth-interaction-black-holes/</a>
3.	Karl Schwarzschild Meeting 2013, Frankfurt am Main, Germany, 22-26.07.2013	<i>Binary Black Holes and Neutron Stars evolutions with the CCZ4 system*</i> <a href="https://fias.institute/en/events/conferences/2013/">https://fias.institute/en/events/conferences/2013/</a>
4.	3 <sup>rd</sup> Iberian Gravitational-Wave Meeting 2013, Valencia, Spain, 20-22.03.2013	<i>General-relativistic resistive-magnetohydrodynamic with the Whisky code*</i> <a href="http://www.adeit-uv.econgres.es/gravitational/programa.en.html">http://www.adeit-uv.econgres.es/gravitational/programa.en.html</a>
5.	The Role and the Origin of Magnetic Fields in Astrophysics, Athens, Greece, 11-12.03.2013	<i>Magnetic fields in relativistic compact-object binaries: Binary Black Hole mergers in Force-Free electrodynamics*</i>
6.	Deutsche Physikalische Gesellschaft e.v.- Fruhjahrstagung 2013/Jena, Germany, 25.02-01.03.2013	<i>Modeling neutron stars using a GR Resistive MHD formalism*</i> <a href="https://www.dpg-verhandlungen.de/year/2013/conference/jena/part/gr/session/9/contribution/7">https://www.dpg-verhandlungen.de/year/2013/conference/jena/part/gr/session/9/contribution/7</a>
7.	26 <sup>th</sup> TEXAS Symposium on Relativistic Astrophysics, Sao Paulo, Brazil, 15-20.12.2012	<i>Electromagnetic and Gravitational Wave emission from merger of supermassive black holes in force-free plasma*</i> <a href="http://www.das.inpe.br/texas2012sp/program.php">http://www.das.inpe.br/texas2012sp/program.php</a> ; <a href="http://www.das.inpe.br/texas2012sp/participants.php">http://www.das.inpe.br/texas2012sp/participants.php</a>
8.	SFB TR7 Spring Meeting, Garching, Germany, 16-17.10.2012	<i>Accurate simulations of Binary Black Hole mergers in Force-Free electrodynamics*</i> <a href="https://www.aei.mpg.de/164710/2010-2012-Triennial-Report.pdf">https://www.aei.mpg.de/164710/2010-2012-Triennial-Report.pdf</a> , pp.154
9.	Astro-GR Conference, Beijing, China, 03-07.09.2012	<i>Electromagnetic Counterparts to Gravitational Wave emission from binary Black Hole mergers *</i> <a href="http://astro-gr.org/astro-gr-beijing-2012-black-hole-growth-universe/">http://astro-gr.org/astro-gr-beijing-2012-black-hole-growth-universe/</a>
10.	13 <sup>th</sup> Marcel Grossmann Meeting, Stockholm, Sweden 01-07.07.2012	<i>Accurate simulations of binary Black Hole mergers in Force-Free electrodynamics*</i> <a href="https://www.worldscientific.com/doi/pdf/10.1142/9789814623995_bmatter">https://www.worldscientific.com/doi/pdf/10.1142/9789814623995_bmatter</a>
11.	Connecting the Electromagnetic and Gravitational Wave Skies in the Era of Advance LIGO, Princeton, USA, 30.04-04.05.2012	Contrib. in Panel Discussion: <i>GR resistive MHD vs ideal MHD and Force-Free approximation, Types of Equation of State for neutron stars, Radiation Transfer in optically thick regime, Numerical methods Runge-Kutta IMEX and Galerkin discontinuous methods - future developments and work in progress</i> <a href="https://community.wvu.edu/~stmcwilliams/Sean_McWilliams/Research_files/RecordingsGravitationalWaves.pdf">https://community.wvu.edu/~stmcwilliams/Sean_McWilliams/Research_files/RecordingsGravitationalWaves.pdf</a>
12.	American Physical Society, APS April Meeting 2012, Atlanta, Georgia, USA, 31.03-03.04.2012	<i>On the detectability of dual jets from binary black holes*</i> <a href="https://meetings.aps.org/Meeting/APR12/PersonIndex/2314">https://meetings.aps.org/Meeting/APR12/PersonIndex/2314</a> <a href="https://meetings.aps.org/Meeting/APR12/Session/J8.1">https://meetings.aps.org/Meeting/APR12/Session/J8.1</a>
13.	SFB TR7 Spring Meeting, Hannover, Germany 14-15.02.2012	Participation as Postdoc scientist in the Sonderforschungsbereich / Transregio7 “Gravitational Wave Astronomy” - Semiannual Meeting. Discussion groups on the scientific results obtained within the German Collaborative Research Center/ Sonderforschungsbereich Transregio 7 (SFB/TR 7), partners: Friedrich Schiller Univ. Jena, Eberhard Karls Univ. Tübingen, Leibniz Univ. Hannover, Max Planck Institut für Gravitationsphysik Hannover, AEI Potsdam-Golm, Max Planck Institut für Astrophysik Garching.
14.	SFB TR7 Autumn Meeting in Tübingen, Germany, 11-12.10.2011	<i>Luminosity estimates of Binary Black Hole mergers in Force-Free electrodynamics*/ Transregio7 “Gravitational Wave Astronomy” - Semiannual Meeting</i>
15.	Astro-GR Conference, Palma de	<i>Numerical Modeling of Gravitational Waves from Black Hole</i>

## Activitatea științifică

	Mallorca, Spain 05-09.09.2011	<i>Binaries</i> Certificate of Attendance/ Universitat de les Illes Balears, Spain; Gobierno de España -Ministerio de Ciencia e Innovación
16.	Numerical Relativity and High Energy Physics (NR/HEP) Workshop, Madeira, Portugal 31.08-03.09.2011	<i>Boson stars as galactic dark matter halos*</i> Class. and Quantum Gravity, 244001, Vol.29, Issue 24, arXiv:1201.5118, DOI:10.1088/0264-9381/29/24/244001; <a href="https://blackholes.tecnico.ulisboa.pt/nrhep/?page=Participants">https://blackholes.tecnico.ulisboa.pt/nrhep/?page=Participants</a> <a href="https://blackholes.tecnico.ulisboa.pt/nrhep/?page=Program">https://blackholes.tecnico.ulisboa.pt/nrhep/?page=Program</a>
17.	Numerical Relativity - Data Analysis Meeting (NRDA), Cardiff, UK, 10-12.07.2011	<i>Numerical Techniques for relativistic resistive MHD*</i> Attendance Certification & participation / Cardiff University, School of Physics and Astronomy, Cardiff, UK.
18.	6 <sup>th</sup> International Conference on Numerical Modelling of Space Plasma Flows, ASTRONUM 2011, Valencia, Spain 13-17.06.2011	<i>Novel techniques in the numerical modeling of relativistic astrophysical plasmas*</i> <a href="https://www.uv.es/astronum2011/attendees.html">https://www.uv.es/astronum2011/attendees.html</a> <a href="https://www.uv.es/astronum2011/talks.html">https://www.uv.es/astronum2011/talks.html</a>
19.	Iberian Gravitational Wave Meeting 2011, Universitat de les Ills Balears, Palma, Spain, 02-04.02.2011	<i>Novel techniques in Numerical Relativity: from Gauge Conditions to Resistive MHD*</i> <a href="http://www.grg.uib.es/IberianGW11/">http://www.grg.uib.es/IberianGW11/</a> <a href="http://www.grg.uib.es/IberianGW11/program.html">http://www.grg.uib.es/IberianGW11/program.html</a>
20.	Multimessenger Emissions from Sources of Gravitational Waves, San Sebastian, Brazil, 29.11-03.12.2010	<i>Binary Black Holes and QNMs / Novel techniques in Numerical Relativity*</i> <a href="http://hostel.ufabc.edu.br/~cecilia.chirenti/mesgw/scientific_program.html">http://hostel.ufabc.edu.br/~cecilia.chirenti/mesgw/scientific_program.html</a>
21.	19 <sup>th</sup> Internat. Conference on General Relativity and Gravitation (GR19), Mexico City, Mexico, 5-9.07.2010	<i>Relativistic Resistive MHD with Whisky*</i> Certificate of Attendance&Presented work /National Autonomous University of México (UNAM), Chair of the LOC.
22.	12 <sup>th</sup> MHD-Days 2009, Astrophysical Institute of Potsdam, Germany 08-09.12.2009	Presentation regarding current and planned research activities, with focus on <i>astrophysical MHD problems / start as postdoctoral researcher</i> at Max Planck Institute for Gravitational Physics, Albert Einstein Institute, Potsdam-Golm . Participation & attendance (as scientist at MPI für Gravitationsphysik, Potsdam)/Astrophysikalisches Institut Potsdam
23.	Physics Conference TIM-09, Timisoara, Romania 27-28.11.2009	<i>Boson Stars as Dark Matter Models*</i> . Invited Conference Lecture, as scientist at Max Planck Institute for Gravitational Physics /Albert Einstein Institute, Potsdam-Golm <a href="https://www.aei.mpg.de/421717/2008-2009-Biennial-Report.pdf">https://www.aei.mpg.de/421717/2008-2009-Biennial-Report.pdf</a> , pp.173; AIP Conf. Proceedings (ACP, volume 1262). <a href="https://link.springer.com/book/9780735408104">https://link.springer.com/book/9780735408104</a>
24.	XXXII Spanish Relativity Meeting - Encuentros Relativistas Espanoles 2009, Bilbao, Spain, 7-11.09.2009	<i>Stability analysis of multi-state boson star configurations*</i> Certificate of participation&oral communication/Universidad del País Vasco/Euskal Herriko Unibertsitatea (UPV/EHU), Facultad de Ciencia, Depart. de Fisica Teorica, ERE2009.
25.	Numerical Relativity - Data Analysis Meeting (NRDA 2009), Potsdam, Germany 06-09.07.2009	Presentation of performed research activities on the topics: <i>Gauge conditions in numerical relativity and astrophysics of binary systems</i> . Workgroup discussions focused on <i>common topics between numerical relativity and gravitational wave data analysis, such as accuracy of parameter estimation in data analysis pipelines</i> .
26.	XXXI Spanish Relativity Meeting - Encuentros Relativistas Espanoles 2008, Salamanca, Spain. 15-19.09.2008	<i>Slicing the throat of a black hole*</i> Certificate of Attendance&Presentation/ University of Salamanca, Facultad de Ciencias, DPTO Fisica, LOC <i>Encuentros Relativistas Esp. 2008</i>
27.	Numerical Modelling of Astrophysical Sources of Gravitational Radiation, Universidad Internacional Menéndez Pelayo, Valencia, Spain, 08-12.09.2008	Participation in workgroup discussions on current research activities performed on the topic: <i>numerical modelling of astrophysical sources of gravitational radiation</i> . Certificate of Participation. University of Valencia, Department of Astronomy and Astrophysics/ On behalf of the LOC.
28.	Post Newton 2008 International Workshop, Jena, Germany, 11-14.06.2008	Workshop at the Fac. of Physics and Astronomy, Friedrich Schiller Univ. Jena. <i>Presentation &amp; dissemination of research results obtained as PhD stud. at Univ. of the Balearic Islands</i> . Jena Jahresbericht 2008, pp.96. <a href="https://www.physik.uni-jena.de/pafmedia/fakultaet/fakultaetsberichte/fakultaetsbericht-2008.pdf?download=1">https://www.physik.uni-jena.de/pafmedia/fakultaet/fakultaetsberichte/fakultaetsbericht-2008.pdf?download=1</a>
29.	XXX Spanish Relativity Meeting -	<i>Efficient implementation of centered finite volume methods in</i>

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	Encuentros Relativistas Espanoles 2007, Puerto de la Cruz, Tenerife, Spain, 10-14.09.2007	<i>Numerical Relativity*</i> <a href="http://research.iac.es/congreso/ere07/pages/scientific-programme.html">http://research.iac.es/congreso/ere07/pages/scientific-programme.html</a> <a href="http://research.iac.es/congreso/ere07/pages/view_abstract3cd9.html?aid=30">http://research.iac.es/congreso/ere07/pages/view_abstract3cd9.html?aid=30</a> <a href="http://research.iac.es/congreso/ere07/pages/participants.html">http://research.iac.es/congreso/ere07/pages/participants.html</a>
30.	XXIX Spanish Relativity Meeting - Encuentros Relativistas Espanoles 2006, Palma de Mallorca, Spain, 04-08.09.2006	Participation in the Scientific Program of ERE2006 as PhD student at the University of the Balearic Islands Certificate of Attendance / Universitat de les Illes Balears, <i>LOC Encuentros Relativistas Espanoles-ERE 2006</i> .
31.	11 <sup>th</sup> Marcel Grossmann Meeting - MG11, Berlin, Germany, 23-29.07.2006	Participation in the Scientific Program of MG11 as PhD student at the University of the Balearic Islands Participation no.18 / Chair of International Coordinating Committee& Freie Universität Berlin, Physics Department
32.	New Frontiers in Numerical Relativity Conference, Potsdam, Germany. 17-21.07.2006	<i>CSI Black Holes: Why do codes crash?</i> * Participation in <i>Numerical Relativity Students and Postdocs Workgroups</i> -discussions: topics on numerical techniques and mathematical methods for numerical simulations of the Einstein eq. for astrophysical binary compact objects.
33.	2 <sup>nd</sup> Annual ILIAS-GW Meeting, Univ. of Balearic Islands, Palma de Mallorca, Spain, 24-25.10.2005	Attending scientific presentations on topics related to the Integrated Large Infrastructure for Astroparticle Science-Gravitational Waves detection.
34.	SYNASC 2004 - 6 <sup>th</sup> International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, Timisoara, Romania, 26-30.09.2004	<i>From Tensor Equations to Numerical Code - Computer Algebra Tools for Numerical Relativity*</i> <a href="https://arxiv.org/abs/cs/0411063">https://arxiv.org/abs/cs/0411063</a> Report number: AEI-2004-108; <a href="https://www.aei.mpg.de/164680/2004-2005-Biennial-Report.pdf">https://www.aei.mpg.de/164680/2004-2005-Biennial-Report.pdf</a> , pp.149
35.	Mathematical Relativity: New Ideas and Developments Conference, Physikzentrum Bad Honnef, Germany 01-05.03.2004	Participation in the Scientific Program of the Conference, as master student; workgroups focused on <i>mathematical formulations of the Einstein eq. for Numerical Relativity</i> .