



CURRICULUM VITAE

PERSONAL DATA

FULL NAME : GUARINO, Adolfo.
CITIZENSHIP : Spanish.
ADDRESS : Departamento de Física – Facultad de Ciencias. Universidad de Oviedo
Campus de Llamaquique. Federico García Lorca 18. CP 33005 –
Oviedo, España.
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Personal website

EDUCATION

2006 - 2010 : Ph.D in Theoretical Physics, Universidad Autónoma de Madrid, Spain.
Thesis Title: “Generalised fluxes, moduli fixing and cosmological implications”.
Thesis Advisor: Prof. Jesús M. Moreno.
Grade: Cum Laude.
2004 - 2006 : M.Sc in Theoretical Physics, Universidad Autónoma de Madrid, Spain.
Master Title: “Inflation in uplifted supergravities”.
Master Advisor: Prof. Jesús M. Moreno.

ACADEMIC TRAJECTORY

2019 : Assistant professor at Universidad de Oviedo, Spain.
2016 - 2018 : Postdoctoral researcher at the Université Libre de Bruxelles, Belgium.
2014 - 2016 : Postdoctoral researcher in the Theory Group at Nikhef, Amsterdam, the Netherlands.
2012 - 2014 : Postdoctoral researcher in the Institute for Theoretical Physics at the University of Bern, Switzerland.
2010 - 2012 : Postdoctoral researcher in the Theoretical High Energy Physics group at the University of Groningen, the Netherlands.

AWARDS/GRANTS

Postdoctoral researcher :
- Research fellowship (4-years) within the Talent Attraction Program from Autonomous Community of Extremadura, Spain (2019). Declined in favour of an assistant professorship at University of Oviedo.
- Seal of Excellence from Marie Skłodowska-Curie action (2018)
- Short-Term Visit Grant at CERN (2017)

- Marina Solvay fellowship, Belgium (2017)
- Short-Term Scientific Missions (STSM) grant by COST MP1210 action (2014)

Predoctoral fellow :

- Ph.D fellowship from Spanish Ministry of Science (2006)
- Marie Curie Fellowship of the European Community programme HUMAN POTENTIAL (2005)
- M.Sc scholarship from Universidad Autónoma de Madrid (2005)
- B.Sc initiation research scholarship from Spanish Ministry of Science (2004)

PUBLICATIONS [\[Link to INSPIRE\]](#)

35. *Brane-jet stability of non-supersymmetric AdS vacua.*
Adolfo Guarino, Javier Tarrío, Oscar Varela.
Published in JHEP 2009:110,2020. e-Print: arXiv:2005.07072.
34. *$\mathcal{N} = 2$ supersymmetric S-folds.*
Adolfo Guarino, Colin Sterckx, Mario Trigiante.
Published in JHEP 2004:050,2020. e-Print: arXiv:2002.03692.
33. *Flowing to $\mathcal{N} = 3$ Chern–Simons-matter theory.*
Adolfo Guarino, Javier Tarrío, Oscar Varela.
Published in JHEP 2003:100,2020. e-Print: arXiv:1910.06866.
32. *Halving ISO(7) supergravity.*
Adolfo Guarino, Javier Tarrío, Oscar Varela.
Published in JHEP 1911:143,2019. e-Print: arXiv:1907.11681.
31. *S-folds and (non-)supersymmetric Janus solutions.*
Adolfo Guarino, Colin Sterckx.
Published in JHEP 1912:113,2019. e-Print: arXiv:1907.04177.
30. *Hypermultiplet gaugings and supersymmetric solutions from 11D and massive IIA supergravity on $H^{(p,q)}$ spaces.*
Adolfo Guarino.
Published in Eur. Phys. J. C (2018) 78:202. e-Print: arXiv:1712.09549.
29. *BPS black hole horizons from massive IIA.*
Adolfo Guarino.
Published in JHEP 1708:100,2017. e-Print: arXiv:1706.01823.
28. *BPS black holes from massive IIA on S^6 .*
Adolfo Guarino, Javier Tarrío.
Published in JHEP 1709:141,2017. e-Print: arXiv:1703.10833.
27. *Double Field Theory at SL(2) angles.*
F. Ciceri, G. Dibitetto, J. J. F. Melgarejo, A. Guarino, G. Inverso.
Published in JHEP 1705:028,2017. e-Print: arXiv:1612.05230.
26. *Romans-mass-driven flows on the D2-brane.*
Adolfo Guarino, Javier Tarrío, Oscar Varela.

- Published in JHEP 1608:168,2016. e-Print: arXiv:1605.09254.
25. *The exceptional story of massive IIA supergravity.*
Franz Ciceri, Adolfo Guarino, Gianluca Inverso.
Published in JHEP 1608:154,2016. e-Print: arXiv:1604.08602.
 24. *Deformed $\mathcal{N} = 8$ supergravity from IIA strings and its Chern-Simons duals.*
Adolfo Guarino, Daniel L. Jafferis, Oscar Varela.
Published in Fortschr. Phys. 64, 330-332(2016).
 23. *Single-step de Sitter vacua from non-perturbative effects with matter.*
Adolfo Guarino, Gianluca Inverso.
Published in Phys. Rev. D 93,066013 (2016). e-Print: arXiv:1511.07841.
 22. *Consistent $\mathcal{N} = 8$ truncation of massive IIA on S^6 .*
Adolfo Guarino, Oscar Varela.
Published in JHEP 1512:020,2015. e-Print: arXiv:1509.02526.
 21. *CSO_c superpotentials.*
Adolfo Guarino.
Published in Nucl.Phys. B900 (2015) 501-516. e-Print: arXiv:1508.05055.
 20. *Dyonic $ISO(7)$ supergravity and the duality hierarchy.*
Adolfo Guarino, Oscar Varela.
Published in JHEP 1602:079,2016. e-Print: arXiv:1508.04432.
 19. *String theory origin of dyonic $\mathcal{N} = 8$ supergravity and its simple Chern-Simons duals.*
Adolfo Guarino, Daniel L. Jafferis, Oscar Varela.
Published in Phys. Rev. Lett. 115, 091601 (2015). e-Print: arXiv:1504.08009.
 18. *KK -monopoles and G -structures in M -theory/type IIA reductions.*
Ulf Danielsson, Giuseppe Dibitetto, Adolfo Guarino.
Published in JHEP 1502:096,2015. e-Print: arXiv:1411.0575.
 17. *A second look at gauged supergravities from fluxes in M -theory.*
Jean-Pierre Derendinger, Adolfo Guarino.
Published in JHEP 1409:162,2014. e-Print: arXiv:1406.6930.
 16. *Lobotomy of flux compactifications.*
Giuseppe Dibitetto, Adolfo Guarino, Diederik Roest.
Published in JHEP 1405:067,2014. e-Print: arXiv:1402.4478.
 15. *On new maximal supergravity and its BPS domain-walls.*
Adolfo Guarino.
Published in JHEP 1402:026,2014. e-Print: arXiv:1311.0785
 14. *Triality, Periodicity and Stability of $SO(8)$ Gauged Supergravity.*
Andrea Borghese, Adolfo Guarino, Diederik Roest.
Published in JHEP 1305:107,2013. e-Print: arXiv:1302.6057
 13. *The many surprises of maximal supergravity.*
Andrea Borghese, Adolfo Guarino, Diederik Roest.
CNUM: C12-10-17. e-Print: arXiv:1301.6919

12. *The $SU(3)$ -invariant sector of new maximal supergravity.*
A. Borghese, G. Dibitetto, A. Guarino, D. Roest, O. Varela.
Published in JHEP 1303:082,2013. e-Print: arXiv:1211.5335
11. *All G_2 invariant critical points of maximal supergravity.*
Andrea Borghese, Adolfo Guarino, Diederik Roest.
Published in JHEP 1212:108,2012. e-Print: arXiv:1209.3003
10. *Exceptional flux compactifications.*
Giuseppe Dibitetto, Adolfo Guarino, Diederik Roest.
Published in JHEP 1205:056,2012. e-Print: arXiv:1202.0770
9. *Vacua analysis in extended supersymmetry compactifications.*
Giuseppe Dibitetto, Adolfo Guarino, Diederik Roest.
Published in Fortschr. Phys., 1-4 (2012). e-Print: arXiv:1112.1306
8. *How to halve maximal supergravity.*
Giuseppe Dibitetto, Adolfo Guarino, Diederik Roest.
Published in JHEP 1106:030,2011. e-Print: arXiv:1104.3587
7. *Charting the landscape of $\mathcal{N} = 4$ flux compactifications.*
Giuseppe Dibitetto, Adolfo Guarino, Diederik Roest.
Published in JHEP 1103:137,2011. e-Print: arXiv:1102.0239
6. *Generalised fluxes, moduli fixing and cosmological implications.*
Adolfo Guarino (Ph.D Thesis). June 2010
SPIRES-HEP database. ISBN 978-84-693-7072-8.
5. *Complete classification of Minkowski vacua in generalised flux models.*
Beatriz de Carlos, Adolfo Guarino, Jesús M. Moreno.
Published in JHEP 1002:076,2010. e-Print: arXiv:0911.2876
4. *Flux moduli stabilisation, Supergravity algebras and no-go theorems.*
Beatriz de Carlos, Adolfo Guarino, Jesús M. Moreno.
Published in JHEP 1001:012,2010. e-Print: arXiv:0907.5580.
3. *Non-geometric flux vacua, S-duality and algebraic geometry.*
Adolfo Guarino, George James Weatherill.
Published in JHEP 0902:042,2009. e-Print: arXiv:0811.2190
2. *Algebras and non-geometric flux vacua.*
Anamaría Font, Adolfo Guarino, Jesús M. Moreno.
Published in JHEP 0812:050,2008. e-Print: arXiv:0809.3748
1. *Inflation in uplifted Supergravities.*
B. de Carlos, J.A. Casas, A. Guarino, J.M. Moreno, O. Seto.
Published in JCAP 0705:002,2007. e-Print: hep-th/0702103

JOBS / POSITIONS HELD

2016 - 2018 :

Place: Physique Mathématique des Interactions Fondamentales group
at Université Libre de Bruxelles, Belgium.
Status: Postdoctoral researcher under Marina Solvay fellowship (2017)
and ERC grant.

- 2014 - 2016 : Place: Theory Group at Nationaal Instituut voor Subatomaire Fysica (Nikhef), Amsterdam, The Netherlands.
Status: Postdoctoral researcher under a contract from FOM.
- 2012 - 2014 : Place: Institute for Theoretical Physics of the Albert Einstein Center for Fundamental Physics. University of Bern, Switzerland.
Status: Postdoctoral researcher under a contract from the University of Bern.
- 2010 - 2012 : Place: Theoretical High Energy Physics group of the Faculty of Mathematics and Natural Sciences. University of Groningen, Netherlands.
Status: Postdoctoral researcher under a contract from the University of Groningen.
- 2005 - 2010 : Place: Instituto de Física Teórica UAM/CSIC. Univ. Autónoma de Madrid, Spain.
Status: M.Sc and Ph.D Student under a FPI contract from the Spanish MICINN.
- 2005 : Place: Department of Particle Physics & Astrophysics. Univ. of Sussex, England.
Project: *Chances for inflation in uplifted supergravities.*
Status: Marie Curie Fellowship of the European Community programme HUMAN POTENTIAL.
- 2004 : Place: Theoretical Physics department. Univ. Autónoma de Madrid, Spain.
Project: *Data analysis of the beam-test from the local muon trigger for the CMS experiment.*
Status: Research Fellowship from the Spanish MEC.

RESEARCH STAYS IN OTHER CENTRES

- 2018 : Short research visit at the Instituto de Física Teórica UAM-CSIC, Madrid, Spain.
- 2017 : Short-term visitor at the CERN Theory Group, Geneva, Switzerland.
- 2013/14/15 : Short research visits at the Theoretical High Energy Physics group, University of Groningen, the Netherlands, and the department of Physics and Astronomy, Uppsala University, Sweden.
- 2007/08/09 : Short research visits at the School of Physics and Astronomy, University of Southampton, England.
- 2007 : Centre de Physique Théorique de l'Ecole Polytechnique (CPHT), Paris, France.
- 2005 : Dept. of Particle Physics & Astrophysics. Univ. of Sussex, Brighton, England.

INVOLVEMENT IN FINANCED PROJECTS

- 2019 - 2021 : Project Title: Holografía, Dualidad y Supergravedad (HoloDualGrav) PGC2018-096894-B-100.
Funding Organisation : Spanish Ministry of Science, Innovation and

- Universities (MCIU).
Principal Investigator: Prof. Yolanda Lozano, Patrick Meessen.
- 2018 - 2020 :
Project ID: GRUPIN – IDI/2018/000174.
Funding Organisation : Principality of Asturias, Spain.
Principal Investigator: Prof. Yolanda Lozano, Patrick Meessen.
- 2016 - 2018 :
Project Title: Teoría de Cuerdas, Holografía y Supergravedad (Holo-Sugrav) FPA2015-63667-P.
Funding Organisation : Spanish Ministry of Science, Innovation and Universities (MCIU).
Principal Investigator: Prof. Yolanda Lozano, Patrick Meessen.
- 2016 - 2021 :
Project Title: Higher Spin Gravity and Generalized Spacetime Geometry.
Funding Organisation : ERC Advanced Grant no. 694089
Principal Investigator: Prof. Marc Henneaux.
- 2015 - 2018 :
Project Title: Interactions Fundamentales.
Funding Organisation : F.R.S.-FNRS Convention IISN-4.4503.15
Principal Investigators: Prof. F. Englert, J.-M. Frère, M. Henneaux.
- 2014 - 2018 :
Project Title: Gravity and extensions.
Funding Organisation : F.R.S.-FNRS Convention PDR T.1025.14
Principal Investigators: Prof. G. Barnich, N.Boulanger, M. Henneaux, P. Spindel.
- 2010 - 2016 :
Project Title: Supersymmetry: a window to non-perturbative Physics.
Funding Organisation : ERC Advanced Grant no. 246974
Principal Investigator: Prof. Bernard de Wit.
- 2012 - 2014 :
Project Title: String compactifications and supersymmetry breaking patterns.
Funding Organisation : Swiss National Science Foundation. 144426
Principal Investigator: Prof. Jean-Pierre Derendinger.
- 2009 - 2013 :
Project Title: Unification in the LHC era.
Funding Organisation : MC-ITN "UNILHC" PITN-GA-2009-237920.
Principal Investigator: Prof. Luis Ibáñez.
- 2008 - 2013 :
Project Title: How stable are extra dimensions?
Funding Organisation : VIDI Grant. Netherlands Organisation for Scientific Research (NWO).
Principal Investigator: Prof. Diederik Roest.
- 2007 - 2010 :
Project Title: Fenomenología más allá del modelo estándar e implicaciones experimentales FPA2007-60252.
Funding Organisation : Spanish Ministry of Science.
Principal Investigator: Prof. José Ramón Espinosa.
- 2006 - 2010 :
Project Title: The origin of our universe: Seeking links between fundamental physics and cosmology.
Funding Organisation : RTN European Program MRTN-CT-2006-035863
Principal Investigator: Prof. Mariano Quirós.
- 2006 - 2010 :
Project Title: Phenomenology of the Fundamental Interactions: Fields, Strings and Cosmology (HEPHACOS) P-ESP-00346.
Funding Organisation : Comunidad de Madrid.
Principal Investigator: Prof. José Ramón Espinosa.

- 2004 - 2008 : Project Title: The Quest For Unification: Theory Confronts Experiment.
Funding Organisation : RTN European Program MRTN-CT-2004-503369.
Principal Investigator: Prof. Luis Ibáñez.
- 2004 - 2007 : Project Title: Fenomenología más allá del modelo estándar e implicaciones experimentales FPA2004-02015.
Funding Organisation : Spanish Ministry of Science.
Principal Investigator: Prof. José Ramón Espinosa.

INVITED SEMINARS [\[Link to slides \(pdf\)\]](#)

22. *Supersymmetric S-folds.*
Online seminar at Imperial College. June 11th 2020, London, England.
21. *Holographic RG flows from massive IIA on S^6 .*
Seminar at CERN. August 8th 2017, Geneva, Switzerland.
20. *Holographic RG flows from massive IIA on S^6 .*
Seminar at Queen Mary University of London. April 6th 2017, London, England.
19. *Cosmological and holographical applications of string dualities.*
Seminar at the Institute for Theoretical Physics. March 3rd 2017, Bern, Switzerland.
18. *Deformed $\mathcal{N} = 8$ supergravity from massive IIA and its Chern-Simons duals.*
Seminar at the Institute for Theoretical Physics. April 12th 2016, Bern, Switzerland.
17. *Dyonic maximal supergravity from massive IIA and its Chern-Simons duals.*
Seminar at Utrecht University. December 10th 2015, Netherlands.
16. *Dyonic maximal supergravity from massive IIA and its Chern-Simons duals.*
Seminar at Uppsala University. December 1st 2015, Sweden.
15. *Deformed $\mathcal{N} = 8$ supergravity, massive IIA strings and Chern-Simons duals.*
Seminar at ULB. November 19th 2015, Brussels, Belgium.
14. *Deformed $\mathcal{N} = 8$ supergravity, massive IIA strings and Chern-Simons duals.*
Seminar at Nikhef. October 6th 2015, Amsterdam, the Netherlands.
13. *Deformed $\mathcal{N} = 8$ supergravity from IIA strings and its Chern-Simons duals.*
Seminar at Van Swinderen Institute for Particle Physics and Gravity. October 5th 2015, Groningen, the Netherlands.
12. *A SINGULAR introduction to the algebra/geometry correspondence.*
Seminar at Nikhef. February 16th 2015, Amsterdam, the Netherlands.
11. *Some aspects of new maximal supergravity.*
Seminar at the Institute for Theoretical Physics, ETH. November 19th 2013, Zurich, Switzerland.
10. *From strings to four dimensions (and back?).*
Seminar at the Faculty of Mathematics and Natural Sciences, University of Groningen. November 4th 2013, Groningen, the Netherlands.

9. *Some aspects of new maximal supergravity.*
Seminar at the department of Physics and Astronomy. October 9th 2013, Uppsala, Sweden.
8. *On the vacua of new $SO(8)$ gauged supergravity.*
Seminar at the Centre de Physique Théorique de l'Ecole Polytechnique (CPHT). March 5th 2013, Paris, France.
7. *Dualities and the landscape of extended supergravity.*
Seminar at Instiute for Theoretical Physics. January 27th 2012, Utrecht, Netherlands.
6. *Dualities and the landscape of extended supergravity.*
Seminar at the department of Physics and Astronomy. December 14th 2011, Uppsala, Sweden.
5. *Gaugings, fluxes and moduli fixing in (half-) maximal supergravity.*
Seminar at the Institute for Theoretical Physics. November 29th 2011, Bern, Switzerland.
4. *Flux vacua from gauged supergravities.*
Seminar at the Max Planck Institute for Gravitational Physics (Albert Einstein Institute). November 22nd 2011, Potsdam, Germany.
3. *Towards disentangling the landscape of extended supergravities.*
Seminar at the Arnold Sommerfeld Center for Theoretical Physics. October 12th 2011, Munich, Germany.
2. *Supergravity algebras and Minkowski vacua in $\mathcal{N} = 1$ generalised flux compactifications.*
Seminar at the Faculty of Mathematics and Natural Sciences, University of Groningen. October 19th 2009, Groningen, Netherlands.
1. *D-terms uplifting and inflation.*
Seminar at the Centre de Physique Théorique de l'Ecole Polytechnique (CPHT). November 27th 2007, Paris, France.

CONFERENCE & WORKSHOP PRESENTATIONS [\[Link to slides \(pdf\)\]](#)

27. *Supersymmetric S-folds.*
Talk given at Iberian Strings 2020. January 15th-17th 2020, Santiago de Compostela, Spain.
26. *Supersymmetric S-folds.*
Invited speaker at III GRASS family and friends meeting. December 19th-20th 2019, Madrid, Spain.
25. *Holographic & geometric aspects of electromagnetic duality in supergravity.*
Invited speaker at Geometry and Duality. Dec 2nd-6th 2019, Potsdam, Germany.
24. *Holographic aspects of electromagnetic duality in supergravity.*
Invited speaker at Holography, Generalized Geometry and Duality. May 6th-17th 2019, Mainz, Germany.

23. *How to get masses from Extended Field Theories.*
Invited speaker at II GRASS family and friends meeting. December 20th-21st 2018, Madrid, Spain.
22. *Accelerating Universes from String Theory.*
Talk given at Spanish-Portuguese Relativity Meeting 2018. September 4th 2018, Palencia, Spain.
21. *Accelerating Universes from String Theory.*
Invited speaker at Be.HEP Summer Solstice 2018. June 21st 2018, Ghent, Belgium.
20. *AdS₄/CFT₃ holography from massive IIA.*
Invited speaker at Geometry, Duality and Strings 2018. May 23rd-26th 2018, Murcia, Spain.
19. *Holographic RG flows from massive IIA.*
Talk given at Iberian Strings 2018. January 24th-26th 2018, Granada, Spain.
18. *Progress in massive IIA holography.*
Invited speaker at String Dualities and Geometry. January 15th-19th 2018, Bariloche, Argentina.
17. *Progress in massive IIA holography.*
Invited speaker at Holography and Supergravity 2018. January 8th-12th 2018, Viña del Mar, Chile.
16. *Holographic RG flows from massive IIA.*
Invited speaker at GRASS family and friends meeting. December 21st-22nd 2017, Madrid, Spain.
15. *Double Field Theory at SL(2) angles.*
Talk given at The String Theory Universe 2017. February 21st 2017, Milano, Italy.
14. *Double Field Theory at SL(2) angles.*
Talk given at Iberian Strings 2017. January 17th 2017, Lisbon, Portugal.
13. *Massive deformations and SL(2) angles from exceptional field theory.*
Invited speaker at Supergravity at 40. October 26th-28th 2016, Florence, Italy.
12. *Expanding universes from string theory.*
Invited speaker at Jamboree 2015. December 14th 2015, Nikhef-Amsterdam, the Netherlands.
11. *Deformed N=8 supergravity from massive IIA and its Chern-Simons duals.*
Invited speaker at Supergravity 2015. October 29-30, Padova, Italy.
10. *Dyonic $\mathcal{N} = 8$ supergravity from IIA strings and its Chern-Simons duals.*
Talk given at The String Theory Universe 2015. Poster also presented. September 7th 2015, Leuven, Belgium.
9. *M-theory beyond twisted tori.*
Talk given at Recent Developments in String Theory 2014. July 24th 2014, Ascona, Switzerland.

8. *Removing orientifolds in flux compactifications.*
Talk given at Iberian Strings 2014. January 31st 2014, Palencia, Spain.
7. *On electromagnetic duality and the vacua of $\mathcal{N} = 8$ supergravity.*
Talk given at The String Theory Universe 2013. September 3rd 2013, Bern, Switzerland.
6. *On electromagnetic duality and the vacua of $\mathcal{N} = 8$ supergravity.*
Talk given at the String Phenomenology 2013. July 17th 2013, Hamburg, Germany.
5. *Exploring new maximal supergravity.*
Invited speaker at the GeNeZiSS 2012. November 30th 2012, Lausanne, Switzerland.
4. *Exceptional flux compactifications.*
Talk given at the String Phenomenology 2012. June 28th 2012, Cambridge, England.
3. *Connecting vacua of half-maximal supergravities: a type IIA example.*
Talk given at the 27th Nordic Network Meeting on "Strings, Fields and Branes". March 24th-26th 2011, Copenhagen, Denmark.
2. *De Sitter universes from string theory.*
Invited speaker at the Kapteyn Astronomical Institute, University of Groningen. March 3rd 2011, Groningen, Netherlands.
1. *Inflation in uplifted supergravities.*
Talk given at the First Annual School of EU Network "UniverseNet"-The origin of the Universe. September 24th-29th 2007, Mytilene, (Lesvos), Greece.

TEACHING EXPERIENCE

2020 :

- Lecturer and examiner of the course "Advanced General Relativity". Master's degree programme in Physics at University of Oviedo, Spain. (45 hours).
- Lecturer and examiner of the course "Statistical Physics". Degree in Physics and Mathematics at University of Oviedo, Spain. Group 1 (68 hours) & Group 2 (68 hours).
- Lecturer and examiner of the course "Differential Equations Applied to Physics II". Degree in Physics and Mathematics at University of Oviedo, Spain. Group 1 (34 hours) & Group 2 (34 hours).

2019 :

- Lecturer and examiner of the course "Advanced General Relativity". Master's degree programme in Physics at University of Oviedo, Spain. (45 hours).
- Lecturer and examiner of the course "Statistical Physics". Degree in Physics and Mathematics at University of Oviedo, Spain. Group 1 (68 hours) & Group 2 (68 hours).
- Lecturer and examiner of the course "Differential Equations Applied to Physics II". Degree in Physics and Mathematics at University of Oviedo, Spain. (40 hours).

2018 :

- Co-lecturer and examiner of the course “Théorie quantique des champs avancée et supersymétrie” (PHYS-F417, 2018). Master’s degree programme in Theoretical Physics at Université Libre de Bruxelles, Belgium (24 hours).
- Teaching assistant of the course “Représentation des groupes et application à la physique” (MATH-F410, 2018). Master’s degree programme in Sciences Mathématiques at Université Libre de Bruxelles, Belgium (12 hours).
- Co-lecturer of the course “Gravitation avancée et théories des cordes.” (PHYS-F418, 2018). Master’s degree programme in Theoretical Physics at Université Libre de Bruxelles, Belgium (24 hours).

2017 :

- Teaching assistant of the course “Représentation des groupes et application à la physique” (MATH-F410, 2017). Master’s degree programme in Sciences Mathématiques at Université Libre de Bruxelles, Belgium (12 hours).

2016 :

- Teaching assistant and examiner of the course “Field Theory in Particle Physics” (2016) (code: NS-TP529M). Master’s degree programme in Theoretical Physics at Utrecht University, the Netherlands (48 hours).
- Student tutorials : Master’s degree programme in Theoretical Physics at Utrecht University (2016), the Netherlands (16 hours). Number of tutored students: ~ 20 .

MENTORING STUDENTS

- Ph.D students:
 - M. A. Chamorro (expected 2024) at University of Oviedo.
 - C. Sterckx (expected 2022) at Université Libre de Bruxelles.
- Master’s students:
 - C. Sterckx (2019) at Université Libre de Bruxelles.
 - S. Bielleman and H. J. Prins (2014) at University of Groningen.
- Bachelor’s students:
 - C. Fernández (2020), E. Mier (2020), A. Escapa (expected 2021), V. García (expected 2021) and M. Armayor (expected 2021) at University of Oviedo.

ACADEMIC HABILITATIONS (IN SPAIN)

- I3 certification: Programa de Incentivación de la Incorporación e Intensificación de la Actividad Investigadora (Programa I3, 2019).
- ANECA accreditations: Profesor contratado doctor, Profesor ayudante doctor and Profesor universidad privada (2018).

- Curso de Adaptación Pedagógica (CAP). Universidad Complutense de Madrid (2005).

PROFESSIONAL ACTIVITIES

- Member of the Permanent Commission of the Instituto Universitario de Ciencias y Tecnologías Espaciales de Asturias (ICTEA).
- Referee for *Journal of High Energy Physics*, *European Physical Journal C*, *Chinese Physics C* and *Nuclear Physics B*.
- External evaluator of research grants for Fondo Nacional de Desarrollo Científico y Tecnológico (FONDECYT) of Chile.
- Seminars & Conferences organisation:
 - Organiser of the Hep-Th Seminars at University of Oviedo (2019 , 2020).
 - Organiser of the Hep-Th Joint Belgian Seminars for the ULB Group (2017 , 2018).
 - Organiser of the Journal Club at Nikhef-Amsterdam (2015 , 2016).
 - Organiser of the Journal Club at University of Groningen (2011 , 2012).
 - Conference assistant at 19th European Workshop on String Theory (2-7 September 2013, Bern).
 - Conference assistant at Strings 2007 (25-29 June 2007, Madrid).
- Outreach activities:
 - Outreach article at Solvay magazine 2018, Belgium: *On the Symmetries of the Big and the small*.
 - Member of IFT-stand at “VIII Feria de la Ciencia, Madrid 2007”.

COMPUTATIONAL SKILLS

Wide knowledge of Unix and Linux O.S. and of technical and scientific software as:

- *Mathematica* : High-performance computational software (link)
- SINGULAR : Computer algebra system for polynomial computations (link)
- LiE : Computer algebra package for Lie group computations (link)
- *Cadabra* : Field theory motivated approach to computer algebra (link)

LANGUAGES

Spanish (native) , English (Cambridge Advanced Certificate, 2018)