

CURRICULUM VITAE

March 4, 2024

Name, nationality: Néstor Armesto, Spanish.

Place, date of birth: Lugo (Spain), October 22nd 1967.

Address: Departamento de Física de Partículas and Instituto Galego de Física de Altas Enerxías, Facultade de Física, Universidade de Santiago de Compostela, Campus Sur, 15706 Santiago de Compostela, Spain.

Telephone (fax) number: +34 881814107 (+34 881814086).

E-mail (URL): nestor.armesto@usc.es. (<http://www-fp.usc.es/nestor>).

University studies and diplomas obtained:

1. Studies of Physics at the Universidade de Santiago de Compostela (Spain) (USC) from October 1986 to September 1989 and of Theoretical Physics at the Universidad Autónoma de Madrid (Spain) (UAM) from October 1989 to June 1991, obtaining the Degree in Physics, speciality of Theoretical Physics, at the UAM in June 1991.
2. Graduation in Physics at the USC in September 1991.
3. Doctorate studies at the Departamento de Física de Partículas (DFP) of the USC from October 1991 to September 1993.
4. Ph.D. in Physical Sciences at the USC in September 1995.

Dissertations/Thesis:

1. Graduation memory entitled “ $1/N$ in cylindrical coordinates”, supervised by Prof. C. Pajares at the DFP of the USC and presented in September 1991.
2. PhD. Thesis entitled “String interactions in multiple production models”, supervised by Prof. C. Pajares at the DFP of the USC and presented in September 1995.

Professional experience:

Teaching:

1. Laboratory of Atomic and Nuclear Physics from October 1993 to June 1994, and Problems of Quantum Mechanics and Laboratory of Atomic and Nuclear Physics from October 1994 to June 1995 at the Facultade de Físicas of the USC.
2. Profesor asociado of Theoretical Mechanics at the same institution from October 1995 to September 1996.
3. Profesor Titular of Atomic, Molecular and Nuclear Physics at the Facultad de Ciencias of the Universidad de Córdoba (UCO) from August 1998 to December 2002.
4. Mathematical Methods IV (Ordinary Differential Equations and Special Functions) dur-

ing the academic years 2004-2005, 2005-2006, 2006-2007, 2007-2008, 2008-2009 and 2009-2010, Mathematical Methods V (Ordinary Differential Equations) during the academic years 2010-2011 to 2013-2014, Mathematical Methods VI (Complex Variable) during the academic years 2013-2014 and 2014-2015, Experimental Techniques II (Mechanics labs) during the academic year 2014-2015, Advanced Quantum Mechanics (Scattering Theory) during the academic years 2004-2005, 2005-2006, and 2008-2009 to 2013-2014, Elementary Particle Physics during the academic years 2011-2012 and 2012-2013, Hadronic Phenomenology (master) during the academic years from 2009-2010 to 2013-2014, High-Density Matter (master) during the academic years from 2009-2010 to 2013-2014, Advanced Computational Physics (master) during the academic year 2014-2015 and Advanced Quantum Mechanics (master) during the academic year 2014-2015 and 2015-2016, at the Faculty of Physics of the USC.

5. Profesor interino de substitución at the Facultade de Físicas of the USC from January to March 2010.

6. Profesor Titular of Theoretical Physics at the Facultade de Físicas of the USC from March 2010 on.

Research:

1. Doctorate study fellowship of the Xunta de Galicia (Spain) at the DFP of the USC from October 1991 to September 1993; Doctoral fellowship of the Xunta de Galicia at the same institution from October 1993 to September 1995.

2. Research at the same institution from October 1995 to October 1996.

3. Postdoctoral fellowship of the Xunta de Galicia at the Laboratoire de Physique Théorique et Hautes Energies of the Université de Paris XI from November 1996 to March 1997.

4. Postdoctoral fellowship of the Ministerio de Educación y Cultura of Spain at the II. Institut für Theoretische Physik of the Universität Hamburg from April 1997 to July 1998.

5. Research at the Facultad de Ciencias of the UCO from August 1998 to December 2002.

6. Fellow at the Theory Division, CERN, Geneva, Switzerland, from January 1st 2003 to December 31st 2004.

7. Contract Ramón y Cajal of the Spanish Ministry of Education and Science from January 1st 2005 to December 31st 2009.

Scientific stays:

– From March 6th to 16th 2002 at CERN, Theory Division, Geneva, Switzerland.

– From March 18th to April 6th 2002 at the Department of Physics, University of Jyväskylä, Jyväskylä, Finland.

– From April 29th to May 24th 2002 at the Physics Department, Brookhaven National Laboratory, Upton, New York, USA.

- From June 1st to September 30th 2013 at the Physics Department, Theory Unit, CERN, as Paid Associate.
- From August 25th to September 6th 2014 at the Department of Physics of the University of Connecticut, Storrs, Connecticut, USA.
- From March 17th to 27th and from May 24th to June 2nd 2015, at the Department of Physics in Ben Gurion University of the Negev, Beer Sheva, Israel, as Distinguished Scientist Visitor.

Scientific techniques acquired:

1. Soft hadronic interactions: Glauber–Gribov model, topological expansion in QCD, Regge field theory, string models (DPM, QGSM), string interactions, nucleus–nucleus collisions, QGP, elastic and diffractive scattering.
2. Small x physics: BFKL/BKP equations, dense partonic systems, diffraction in soft hadronic collisions and DIS.
3. QCD: Parton model, perturbative QCD, heavy flavour production.
4. Hadronic interactions in Cosmic Ray Physics at ultrahigh energies.
5. Computer experience: DOS, Windows, VMS and Unix operating systems, C and FORTRAN programming languages, CERNLIB packages, Monte Carlo simulation; system managing of DEC Alpha 3000 workstations and PC's under Linux.

List of publications in journals:

1. “Inelastic diffractive production and string fusion at high energies”, by N. Armesto, M. A. Braun and C. Pajares, Phys. Rev. D48 (1993) 162–167.
2. “Long and Short Range Correlations: A Signature of String Fusion”, by N. S. Amelin, N. Armesto, M. A. Braun, E. G. Ferreira and C. Pajares, Phys. Rev. Lett. 73 (1994) 2813–2816.
3. “Strangeness enhancement and string fusion in nucleus–nucleus collisions”, by N. Armesto, M. A. Braun, E. G. Ferreira and C. Pajares, Phys. Lett. B344 (1995) 301–307.
4. “Inelastic diffractive production and string fusion in hadron–nucleus collisions”, by N. Armesto, M. A. Braun and C. Pajares, Phys. Rev. C51 (1995) 3393–3403.
5. “Scaling behaviour and correlations in the string fusion model for heavy ion collisions”, by N. Armesto, M. A. Braun, E. G. Ferreira and C. Pajares, Z. Phys. C67 (1995) 489–493.
6. “Monte Carlo model for multiparticle production at ultrarelativistic energies”, by N. S. Amelin, H. Stöcker, W. Greiner, N. Armesto, M. A. Braun and C. Pajares, Phys. Rev. C52 (1995) 362–373.
7. “A–dependence of heavy flavour production in QCD”, by N. Armesto, C. Pajares, C. A. Salgado and Yu. M. Shabelski, Phys. Lett. B366 (1996) 276–280.
8. “Fast antibaryon production in pp collisions as a result of string fusion”, by N. Armesto, E.

- G. Ferreiro, C. Pajares and Yu. M. Shabelski, *Z. Phys.* C73 (1997) 309–313.
9. “The pomeron–pomeron interaction in the perturbative QCD”, by N. Armesto and M. A. Braun, *Phys. Lett.* B385 (1996) 284–292.
10. “Fusion of strings and cosmic rays at ultrahigh energies”, by N. Armesto, M. A. Braun, E. G. Ferreiro, C. Pajares and Yu. M. Shabelski, *Phys. Lett.* B389 (1996) 78–82.
11. “Percolation approach to Quark Gluon Plasma and J/ψ suppression”, by N. Armesto, M. A. Braun, E. G. Ferreiro and C. Pajares, *Phys. Rev. Lett.* 77 (1996) 3736–3738.
12. “Fusion of strings and its consequences at the highest cosmic ray energies”, by N. Armesto, M. A. Braun, E. G. Ferreiro, C. Pajares and Yu. M. Shabelski, *Astropart. Phys.* 6 (1997) 329–336.
13. “On the odderon intercept in perturbative QCD”, by N. Armesto and M. A. Braun, *Z. Phys.* C75 (1997) 709–716.
14. “The EMC effect at low x in perturbative QCD”, by N. Armesto and M. A. Braun, *Z. Phys.* C76 (1997) 81–90.
15. “A Dependences of the Cross Sections for Hard Processes in QCD”, by N. Armesto, C. Pajares, C. A. Salgado and Yu. M. Shabelski, *Phys. At. Nucl.* 61 (1998) 125–132.
16. “Probabilistic versus field–theoretical description of heavy flavour production off nuclei”, by M. A. Braun, C. Pajares, C. A. Salgado, N. Armesto and A. Capella, *Nucl. Phys.* B509 (1998) 357–377.
17. “A quantitative reanalysis of charmonium suppression in nuclear collisions”, by N. Armesto and A. Capella, *Phys. Lett.* B430 (1998) 23–31.
18. “Charmonium Suppression in Lead–Lead Collisions: Is There a Break in the J/ψ Cross–Section?”, by N. Armesto, A. Capella and E. G. Ferreiro, *Phys. Rev.* C59 (1999) 395–404.
19. “The 2nd Order Corrections to the Hard pomeron and the Running Coupling”, by N. Armesto, J. Bartels and M. A. Braun, *Phys. Lett.* B442 (1998) 459–469.
20. “Central Rapidity Densities of Charged Particles at RHIC and LHC”, by N. Armesto and C. Pajares, *Int. J. Mod. Phys.* A15 (2000) 2019–2051.
21. “Parton densities and dipole cross-sections at small x in large nuclei”, by N. Armesto and M. A. Braun, *Eur. Phys. J.* C20 (2001) 517–522.
22. “Monte Carlo model for nuclear collisions from SPS to LHC energies”, by N. S. Amelin, N. Armesto, C. Pajares and D. Sousa, *Eur. Phys. J.* C22 (2001) 149–163.
23. “A geometrical estimation of saturation of partonic densities”, by N. Armesto and C. A. Salgado, *Phys. Lett.* B520 (2001) 124–130.
24. “Nuclear structure functions and heavy flavour leptoproduction off the nucleus at small x in perturbative QCD”, by N. Armesto and M. A. Braun, *Eur. Phys. J.* C22 (2001) 351–357.

25. “Analysis of the first RHIC results in the String Fusion Model”, by N. Armesto, C. Pajares and D. Sousa, *Phys. Lett.* B527 (2002) 92–98.
26. “A simple model for nuclear structure functions at small x in the dipole picture”, by N. Armesto, *Eur. Phys. J.* C26 (2002) 35–43.
27. “Nuclear Structure Functions at Small x from Inelastic Shadowing and Diffraction”, by N. Armesto, A. Capella, A. B. Kaidalov, J. López-Albacete and C. A. Salgado, *Eur. Phys. J.* C29 (2003) 531–540.
28. “Energy dependence of the Cronin effect from non-linear QCD evolution”, by J. L. Albacete, N. Armesto, A. Kovner, C. A. Salgado and U. A. Wiedemann, *Phys. Rev. Lett.* 92 (2004) 082001-1–082001-4.
29. “Medium-Induced Gluon Radiation off Massive Quarks Fills the Dead Cone”, by N. Armesto, C. A. Salgado and U. A. Wiedemann, *Phys. Rev.* D69 (2004) 114003-1–114003-16.
30. “Measuring The Collective Flow With Jets”, by N. Armesto, C. A. Salgado and U. A. Wiedemann, *Phys. Rev. Lett.* 93 (2004) 242301-1–242301-4.
31. “Relating high-energy lepton-hadron, proton-nucleus and nucleus-nucleus collisions through geometric scaling”, by N. Armesto, C. A. Salgado and U. A. Wiedemann, *Phys. Rev. Lett.* 94 (2005) 022002-1–022002-4.
32. “Numerical analysis of the Balitsky-Kovchegov equation with running coupling: dependence of the saturation scale on nuclear size and rapidity”, by J. L. Albacete, N. Armesto, J. G. Milhano, C. A. Salgado and U. A. Wiedemann, *Phys. Rev.* D71 (2005) 014003-1–014003-12.
33. “Collective behavior in nuclear interactions and shower development”, by V. Canoa, N. Armesto, C. Pajares and R. A. Vazquez, *Astropart. Phys.* 23 (2005) 435–443.
34. “Testing the Color Charge and Mass Dependence of Parton Energy Loss with Heavy-to-light Ratios at RHIC and LHC”, by N. Armesto, A. Dainese, C. A. Salgado and U. A. Wiedemann, *Phys. Rev.* D71 (2005) 054027-1–054027-10.
35. “Low- p_T collective flow induces high- p_T jet quenching”, by N. Armesto, C. A. Salgado and U. A. Wiedemann, *Phys. Rev.* C72 (2005) 064910-1–064910-13.
36. “How sensitive are high- p_T electron spectra at RHIC to heavy quark energy loss?”, by N. Armesto, M. Cacciari, A. Dainese, C. A. Salgado and U. A. Wiedemann, *Phys. Lett.* B637 (2006) 362–366.
37. “On correlations and discreteness in non-linear QCD evolution”, by N. Armesto and J. G. Milhano, *Phys. Rev.* D73 (2006) 114003-1–114003-10.
38. “Nuclear shadowing”, by N. Armesto, invited topical review, *J. Phys. G: Nucl. Part. Phys.* 32 (2006) R367–R393.

39. “Jet quenching at finite ‘t Hooft coupling and chemical potential from AdS/CFT”, by N. Armesto, J. D. Edelstein and J. Mas, JHEP09 (2006) 039.
40. Contribution to the *ALICE Physics Performance Report, Volume II*, Eds. B. Alessandro, F. Antinori, J. A. Belikov, C. Blume, A. Dainese, P. Foka, P. Giubellino, B. Hippolyte, C. Kuhn, G. Martínez, M. Monteno, A. Morsch, T. K. Nayak, J. Nystrand, M. López Noriega, G. Paic, J. Pluta, L. Ramello, J.-P. Revol, K. Safarík, J. Schukraft, Y. Schutz, E. Scapparini, R. Snellings, O. Villalobos Baillie and E. Vercellin, J. Phys. G: Nucl. Part. Phys. 32 (2006) 1295–2040, as External Contributor.
41. “Long Range Forward-Backward Correlations and the Color Glass Condensate”, by N. Armesto, L. McLerran and C. Pajares, Nucl. Phys. A781 (2007) 201–208.
42. “ $\mathcal{O}(\alpha_s^2)$ -corrections to JIMWLK evolution from the classical equations of motion”, by J. L. Albacete, N. Armesto and J. G. Milhano, JHEP11 (2006) 074.
43. “Long-range correlations in hadron-nucleus collisions”, by N. Armesto, M. A. Braun and C. Pajares, Phys. Rev. C75 (2007) 054902-1–054902-8.
44. “Charged Current Neutrino Cross Section and Tau Energy Loss at Ultra-High Energies”, by N. Armesto, C. Merino, G. Parente and E. Zas, Phys. Rev. D77 (2008) 013001-1–013001-8.
45. “Medium-evolved fragmentation functions”, by N. Armesto, L. Cunqueiro, C. A. Salgado and W.-C. Xiang, JHEP02 (2008) 048.
46. “Heavy Ion Collisions at the LHC - Last Call for Predictions”, by N. Armesto, N. Borghini, S. Jeon and U. A. Wiedemann (editors; N. Armesto author of two contributions), J. Phys. G35 (2008) 054001.
47. “Reaction-diffusion processes in zero transverse dimensions as toy models for high-energy QCD”, by N. Armesto, S. Bondarenko, J. G. Milhano and P. Quiroga, JHEP05 (2008) 103.
48. “ p_T -multiplicity correlations in a multi-pomeron-exchange model with string collective effects”, by N. Armesto, D. Derkach and G. A. Feofilov, Phys. At. Nucl. 71 (2008) 2122–2131.
49. “Líquido de quarks y gluones”, by N. Armesto and C. Pajares, invited topical review, Revista Iberoamericana de Física 4 (2008) 3–12.
50. “The ALICE experiment at the CERN LHC”, ALICE Collaboration: K. Aamodt et al., JINST 3 (2008) S08002.
51. “Non-linear QCD meets data: A global analysis of lepton-proton scattering with running coupling BK evolution”, by J. L. Albacete, N. Armesto, J. G. Milhano and C. A. Salgado, Phys. Rev. D80 (2009) 034031-1–034031–11.
52. “Q-PYTHIA: a medium-modified implementation of final state radiation”, by N. Armesto, L. Cunqueiro and C. A. Salgado, Eur. Phys. J. C63 (2009) 679–690.
53. “Angular-ordered parton showers with medium-modified splitting functions”, by N. Armesto,

- G. Corcella, L. Cunqueiro and C. A. Salgado, JHEP11 (2009) 122.
54. “Constraint fitting of experimental data with a jet quenching model embedded in a hydrodynamical bulk medium”, by N. Armesto, M. Cacciari, T. Hirano, J. L. Nagle and C. A. Salgado, J. Phys. G37 (2010) 025104-1–025104-17.
55. “First proton–proton collisions at the LHC as observed with the ALICE detector: measurement of the charged particle pseudorapidity density at $\sqrt{s} = 900$ GeV”, ALICE Collaboration: K. Aamodt et al., Eur. Phys. J. C65 (2010) 111–125.
56. “A unitarized model of inclusive and diffractive DIS with Q^2 -evolution”, by N. Armesto, A. B. Kaidalov, C. A. Salgado and K. Tywoniuk, Phys. Rev. D81 (2010) 074002.
57. “Predictions for the heavy-ion programme at the Large Hadron Collider”, by N. Armesto, preprint arXiv:0903.1330 [hep-ph], in *Quark-Gluon Plasma 4* (R. C. Hwa and X.-N. Wang, eds.), World Scientific 2010, p. 375-437.
58. “Charged-particle multiplicity measurement in proton-proton collisions at $\sqrt{s} = 7$ TeV with ALICE at LHC”, ALICE Collaboration: K. Aamodt et al., Eur. Phys. J. C68 (2010) 345–354.
59. “Nuclear shadowing in Glauber-Gribov theory with Q^2 -evolution”, by N. Armesto, A. B. Kaidalov, C. A. Salgado and K. Tywoniuk, Eur. Phys. J. C68 (2010) 447–457.
60. “Charged-particle multiplicity measurement in proton-proton collisions at $\sqrt{s} = 0.9$ and 2.36 TeV with ALICE at LHC”, ALICE Collaboration: K. Aamodt et al., Eur. Phys. J. C68 (2010) 89–108.
61. “Midrapidity antiproton-to-proton ratio in pp collisions at $\sqrt{s} = 0.9$ and 7 TeV measured by the ALICE experiment”, ALICE Collaboration: K. Aamodt et al., Phys. Rev. Lett.105 (2010) 072002.
62. “Nuclear effects on the longitudinal structure function at small x ”, by N. Armesto, H. Paukkunen, C. A. Salgado and K. Tywoniuk, Phys. Lett. B694 (2010) 38–43.
63. “Transverse momentum spectra of charged particles in proton-proton collisions at $\sqrt{s} = 900$ GeV with ALICE at the LHC”, ALICE Collaboration: K. Aamodt et al., Phys. Lett. B693 (2010) 53–68.
64. “Alignment of the ALICE Inner Tracking System with cosmic-ray tracks”, ALICE Collaboration: K. Aamodt et al., JINST 5 (2010) P03003.
65. “Two-pion Bose-Einstein correlations in pp collisions at $\sqrt{s} = 900$ GeV”, ALICE Collaboration: K. Aamodt et al., Phys. Rev. D82 (2010) 052001.
66. “Elliptic flow of charged particles in Pb-Pb collisions at 2.76 TeV”, ALICE Collaboration: K. Aamodt et al., Phys. Rev. Lett. 105 (2010) 252302.
67. “Suppression of Charged Particle Production at Large Transverse Momentum in Central

- Pb–Pb Collisions at $\sqrt{s_{NN}} = 2.76$ TeV”, ALICE Collaboration: K. Aamodt et al., Phys. Lett. B696 (2011) 30–39.
68. “Two-pion Bose-Einstein correlations in central Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV”, ALICE Collaboration: K. Aamodt et al., Phys. Lett. B696 (2011) 328–337.
69. “Charged-particle multiplicity density at mid-rapidity in central Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV”, ALICE Collaboration: K. Aamodt et al., Phys. Rev. Lett. 105 (2011) 252301-1–252301-11.
70. “Centrality Dependence of the Charged-Particle Multiplicity Density at Midrapidity in Pb-Pb Collisions at $\sqrt{s_{NN}} = 2.76$ TeV”, ALICE Collaboration: K. Aamodt et al., Phys. Rev. Lett. 106 (2011) 032301-1–032301-10.
71. “Strange particle production in proton-proton collisions at $\sqrt{s} = 0.9$ TeV with ALICE at the LHC”, ALICE Collaboration: K. Aamodt et al., Eur. Phys. J. C71 (2011) 1594–1617.
72. “Production of pions, kaons and protons in pp collisions at $\sqrt{s} = 900$ GeV with ALICE at the LHC”, ALICE Collaboration: K. Aamodt et al., Eur. Phys. J. C71 (2011) 1655-1–1655-22.
73. “Femtoscopy of pp collisions at $\sqrt{s} = 0.9$ and 7 TeV at the LHC with two-pion Bose-Einstein correlations”, ALICE Collaboration: K. Aamodt et al., Phys. Rev. D84 (2011) 112004.
74. “AAMQS: A non-linear QCD analysis of new HERA data at small-x including heavy quarks”, by J. L. Albacete, N. Armesto, J. G. Milhano, P. Quiroga and C. A. Salgado, Eur. Phys. J. C71 (2011) 1705-1–1705-11.
75. “Rapidity and transverse momentum dependence of inclusive J/ψ production in pp collisions at $\sqrt{s} = 7$ TeV”, ALICE Collaboration: K. Aamodt et al., Phys. Lett. B704 (2011) 442-455.
76. “Cromodinámica Cuántica”, by N. Armesto and C. Pajares, invited topical review, Revista Española de Física 25, no. 4, 19–30 (2011).
77. “Proton-Nucleus Collisions at the LHC: Scientific Opportunities and Requirements”, by C. A. Salgado (editor), J. Alvarez-Muniz et al., J. Phys. G39 (2012) 015010.
78. “Coherence effects and broadening in medium-induced QCD radiation off a massive $q\bar{q}$ antenna”, by N. Armesto, H. Ma, Y. Mehtar-Tani, C. A. Salgado and K. Tywoniuk, JHEP01 (2012) 109.
79. “Harmonic decomposition of two-particle angular correlations in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV”, ALICE Collaboration: K. Aamodt et al., Phys. Lett. B708 (2012) 249-264.
80. “Heavy flavour decay muon production at forward rapidity in proton–proton collisions at $\sqrt{s} = 7$ TeV”, ALICE Collaboration: B. Abelev et al., Phys. Lett. B708 (2012) 265-275.
81. “ J/ψ polarization in pp collisions at $\sqrt{s} = 7$ TeV”, ALICE Collaboration: B. Abelev et al., Phys. Rev. Lett. 108 (2012) 082001.

82. “ J/ψ Production as a function of charged particle multiplicity in pp collisions at $\sqrt{s} = 7$ TeV”, ALICE Collaboration: B. Abelev et al., Phys. Lett. B712 (2012) 165-175.
83. “Multi-strange baryon production in pp collisions at $\sqrt{s} = 7$ TeV with ALICE”, ALICE Collaboration: B. Abelev et al., Phys. Lett. B712 (2012) 309-318.
84. “A Large Hadron Electron Collider at CERN. Report on the Physics and Design Concepts for Machine and Detector”, LHeC Study Group: J. L. Abelleira Fernandez et al., J. Phys. G39 (2012) 075001.
85. “Higher harmonic anisotropic flow measurements of charged particles in Pb-Pb collisions at $\sqrt{s_{(NN)}} = 2.76$ TeV”, ALICE Collaboration: K. Aamodt et al., Phys. Rev. Lett. 107 (2011) 032301.
86. “Particle-yield modification in jet-like azimuthal di-hadron correlations in Pb-Pb collisions at $\sqrt{s_{(NN)}} = 2.76$ TeV”, ALICE Collaboration: K. Aamodt et al., Phys. Rev. Lett. 108 (2012) 092301.
87. “Measurement of charm production at central rapidity in proton-proton collisions at $\sqrt{s} = 7$ TeV”, ALICE Collaboration: B. Abelev et al., JHEP 1201 (2012) 128.
88. “Underlying Event measurements in pp collisions at $\sqrt{s} = 0.9$ and 7 TeV with the ALICE experiment at the LHC”, ALICE Collaboration: B. Abelev et al., JHEP 1207 (2012) 116.
89. “Light vector meson production in pp collisions at $\sqrt{s} = 7$ TeV”, ALICE Collaboration: B. Abelev et al., Phys. Lett. B710 (2012) 557-568.
90. “Measurement of Event Background Fluctuations for Charged Particle Jet Reconstruction in Pb-Pb collisions at $\sqrt{s_{(NN)}} = 2.76$ TeV”, ALICE Collaboration: B. Abelev et al., JHEP 1203 (2012) 053.
91. “Interference between initial and final state radiation in a QCD medium”, N. Armesto, H. Ma, M. Martínez, Y. Mehtar-Tani and C. A. Salgado, Phys. Lett. B717 (2012) 280-286.
92. “Medium-induced emissions of hard gluons”, L. Apolinário, N. Armesto and C. A. Salgado, Phys. Lett. B718 (2012) 160-168.
93. “Comparison of jet quenching formalisms for a quark-gluon plasma “brick””, by N. Armesto, B. Cole, C. Gale et al., Phys. Rev. C86 (2012) 064904.
94. “An analysis of the influence of background subtraction and quenching on jet observables in heavy-ion collisions”, by L. Apolinário, N. Armesto and L. Cunqueiro, JHEP02 (2013) 022.
95. “Predictions for p +Pb collisions at $\sqrt{s_{NN}} = 5$ TeV”, by J. L. Albacete, N. Armesto et al., Int. J. Mod. Phys. E22 (2013) 1330007.
96. “Bayesian reweighting of nuclear PDFs and constraints from proton-lead collisions at the LHC”, by N. Armesto, J. Rojo, C. A. Salgado and P. Zurita, JHEP11 (2013) 015.
97. “Coherence phenomena between initial and final state radiation in a dense QCD medium”,

- by N. Armesto, H. Ma, M. Martínez, Y. Mehtar-Tani and C. A. Salgado, JHEP12 (2013) 052.
98. “Next-to-eikonal corrections in the CGC: gluon production and spin asymmetries in pA collisions”, by T. Altinoluk, N. Armesto, G. Beuf, M. Martínez and C. A. Salgado, JHEP 1407 (2014) 068.
99. “KLWMIJ Reggeon field theory beyond the large N_c limit”, by T. Altinoluk, N. Armesto, A. Kovner, E. M. Levin and M. Lublinsky, JHEP 1408 (2014) 007.
100. “Exclusive vector meson production at high energies and gluon saturation”, by N. Armesto and A. H. Rezaeian, Phys. Rev. D90 (2014) 054003.
101. “Quantum Chromodynamics”, by N. Armesto and C. Pajares, Springer Proc. Phys. 161 (2015) 48–96.
102. “Medium-induced gluon radiation and colour decoherence beyond the soft approximation”, by L. Apolinário, N. Armesto, J. G. Milhano and C. A. Salgado, JHEP1502 (2015) 119.
103. “Single inclusive particle production in proton-nucleus collisions at next-to-leading order in the hybrid formalism”, by T. Altinoluk, N. Armesto, G. Beuf, A. Kovner and M. Lublinsky, Phys. Rev. D91 (2015) 094016.
104. “Kinematic biases on centrality selection of jet events in pPb collisions at the LHC”, by N. Armesto, D. C. Gulhan and J. G. Milhano, Phys. Lett. B747 (2015) 441–445.
105. “Bose enhancement and the ridge”, by T. Altinoluk, N. Armesto, G. Beuf, A. Kovner and M. Lublinsky, Phys. Lett. B751 (2015) 448–452.
106. “Hanbury-Brown-Twiss measurements at large rapidity separations, or can we measure the proton radius in p-A collisions?”, by T. Altinoluk, N. Armesto, G. Beuf, A. Kovner and M. Lublinsky, Phys. Lett. B752 (2016) 113–121.
107. “Next-to-next-to-eikonal corrections in the CGC”, by T. Altinoluk, N. Armesto, G. Beuf and A. Moscoso, JHEP01 (2016) 114.
108. “Heavy-ion collisions at the Large Hadron Collider: a review of the results from Run 1”, by N. Armesto and E. Scapparini, Eur. Phys. J. Plus 131 (2016) 52.
109. “Heavy Quarks in Proton-Nucleus Collisions - The Hybrid Formalism”, by T. Altinoluk, N. Armesto, G. Beuf, A. Kovner and M. Lublinsky, Phys. Rev. D93 (2016) 054049.
110. “An analysis of the impact of LHC Run I proton-lead data on nuclear parton densities”, by N. Armesto, H. Paukkunen, J. M. Penín, C. A. Salgado and Pía Zurita, Eur. Phys. J. C 76 (2016) 218.
111. “Diffractive Dijet Production in Deep Inelastic Scattering and Photon-Hadron Collisions in the Color Glass Condensate” by T. Altinoluk, N. Armesto, G. Beuf and A. H. Rezaeian, Phys. Lett. B758 (2016) 373–383.
112. “Energy versus centrality dependence of the jet quenching parameter \hat{q} at RHIC and LHC:

- a new puzzle? ”, by C. Andrés, N. Armesto, M. Luzum, C. A. Salgado and P. Zurita, Eur. Phys. J. C76 (2016) 475.
113. “Quark correlations in the Color Glass Condensate: Pauli blocking and the ridge”, by T. Altinoluk, N. Armesto, G. Beuf, A. Kovner and M. Lublinsky, Phys. Rev. D95 (2017) 034025.
114. “Soft photon and two hard jets forward production in proton-nucleus collisions” by T. Altinoluk, N. Armesto, A. Kovner, M. Lublinsky and E. Petreska, JHEP 1804 (2018) 063.
115. “Correlations and the ridge in the Color Glass Condensate beyond the glasma graph approximation”, by T. Altinoluk, N. Armesto and D. Wertepny, JHEP 1805 (2018) 207.
116. “Double and triple inclusive gluon production at mid rapidity: quantum interference in p-A scattering”, by T. Altinoluk, N. Armesto, A. Kovner and M. Lublinsky, Eur. Phys. J. C (2018) 78:702.
117. “The Color Glass Condensate density matrix: Lindblad evolution, entanglement entropy and Wigner functional”, by N. Armesto, F. Dominguez, A. Kovner, M. Lublinsky and V. Skokov, JHEP 1905 (2019) 025.
118. “FCC-ee: The Lepton Collider”, by A. Abada *et al.*, Eur. Phys. J. ST 228 (2019) no.2, 261-623.
119. “FCC Physics Opportunities”, by A. Abada *et al.*, Eur. Phys. J. C79 (2019) no.6, 474.
120. “Non-eikonal corrections to multi-particle production in the Color Glass Condensate”, by P. Agostini, T. Altinoluk and N. Armesto, Eur. Phys. J. C79 (2019) no. 7, 600.
121. “FCC-hh: The Hadron Collider”, por A. Abada *et al.*, Eur. Phys. J. ST 228 (2019) no.4, 755-1107.
122. “HE-LHC: The High-Energy Large Hadron Collider”, por A. Abada *et al.*, Eur. Phys. J. ST 228 (2019) no.5, 1109-1382.
123. “Effect of non-eikonal corrections on azimuthal asymmetries in the Color Glass Condensate”, by P. Agostini, T. Altinoluk and N. Armesto, Eur. Phys. J. C79 (2019) no.9, 790.
124. “Physics Briefing Book: European Strategy for Particle Physics Preparatory Group”, R. K. Ellis *et al.*, preprint CERN-ESU-004.
125. “Inclusive diffraction in future electron-proton and electron-ion colliders”, by N. Armesto, P. R. Newman, W. Slominski and A. M. Stasto, Phys. Rev. D100 (2019) 074022.
126. “Report from Working Group 5 : Future physics opportunities for high-density QCD at the LHC with heavy-ion and proton beams”, by Z. Citron *et al.*, CERN Yellow Rep.Monogr. (2019) 1159-1410.
127. “Heavy ions at the Future Circular Collider”, by A. Dainese *et al.*, CERN Yellow Rep. (2017) no.3, 635-692.
128. “Constraining energy loss from high- p_T azimuthal asymmetries”, by C. Andrés, N.

- Armesto, H. Niemi, R. Paatelainen and C. A. Salgado, Phys. Lett. B803 (2020) 135318.
129. “Particle correlations from the initial state”, by T. Altinoluk and N. Armesto, Eur. Phys. J. A56 (2020) 215.
130. “The Large Hadron-Electron Collider at the HL-LHC”, P. Agostini et al., J. Phys. G: Nucl. Part. Phys. 48 (2021) 110501.
131. “Angular correlations in pA collisions from CGC: multiplicity and mean transverse momentum dependence of v_2 ”, by T. Altinoluk, N. Armesto, A. Kovner, M. Lublinsky and V. Skokov, Eur. Phys. J. C 81 (2021) 7, 583.
132. “Science Requirements and Detector Concepts for the Electron-Ion Collider: EIC Yellow Report”, R. Abdul Khalek et al., Nucl. Phys. A 1026 (2022) 122447.
133. “Multi-particle production in proton-nucleus collisions in the Color Glass Condensate”, by P. Agostini, T. Altinoluk and N. Armesto, Eur. Phys. J. C 81 (2021) 8, 760.
134. “An Experiment for Electron-Hadron Scattering at the LHC”, by K. D. J. Andre et al., Eur. Phys. J. C 82 (2022) 1, 40.
135. “Diffractive longitudinal structure function at the Electron Ion Collider”, by N. Armesto, P. R. Newman, W. Slominski and A. M. Stasto, Phys. Rev. D 105 (2022) 074006.
136. “Signatures of gluon saturation from structure-function measurements”, by N. Armesto, T. Lappi, H. Mäntysaari, H. Paukkunen and M. Tevio, Phys. Rev. D 105 (2022) 11, 114017.
137. “Multiparticle production in proton-nucleus collisions beyond eikonal accuracy”, by P. Agostini, T. Altinoluk, N. Armesto, F. Dominguez and J. G. Milhano, Eur. Phys. J. C (2022) 82, 1001.
138. “Snowmass 2021 whitepaper: Proton structure at the precision frontier”, by S. Amoroso *et al.*, Acta Phys.Polon.B 53 (2022) 12, A1.
139. “Finite width effects on the azimuthal asymmetry in proton-nucleus collisions in the Color Glass Condensate”, by P. Agostini, T. Altinoluk and N. Armesto, Phys. Lett. B840 (2023) 137892.
140. “Single inclusive particle production at next-to-leading order in proton-nucleus collisions at forward rapidities: hybrid approach meets TMD factorization”, by T. Altinoluk, N. Armesto, A. Kovner and M. Lublinsky, Phys. Rev. D 108, 074003 (2023).
141. “Probing quark transverse momentum distributions in the Color Glass Condensate: quark-gluon dijets in Deep Inelastic Scattering at next-to-eikonal accuracy”, by T. Altinoluk, N. Armesto and G. Beuf, Phys. Rev. D 108, 074023 (2023).
142. “Particle Production in pA Collisions at Mid-Rapidity in the Color Glass Condensate”, by P. Agostini, T. Altinoluk and N. Armesto, Universe 10 (2024) 2, 58.
143. “Impact of Inclusive Electron Ion Collider Data on Collinear Parton Distributions”, by

N. Armesto, T. Cridge, F. Giuli, L. Harland-Lang, P. Newman, B. Schmookler, R. Thorne and K. Wichmann, preprint 2309.11269 [hep-ph], to appear in Phys. Rev. D.

Contributions to conferences:

1. “String fusion and strangeness enhancement”, by N. Armesto, C. Pajares and N. S. Amelin, Proceedings of the *XXIII International Symposium on Multiparticle Dynamics*, Eds. M. M. Block and A. R. White, World Scientific, Singapore 1994, p. 353–358.
2. “Monte Carlo model for particle production at ultra-relativistic energies”, by N. S. Amelin, H. Stöcker, W. Greiner, N. Armesto and C. Pajares, Proceedings of the NASI School on *Hot and Dense Nuclear Matter*, Eds. W. Greiner, H. Stöcker and A. Gallmann, Plenum Publishing Company, New York 1994, p. 809–821.
3. “Long and short range correlations and the search of the Quark Gluon Plasma”, by N. Armesto, M. A. Braun, E. G. Ferreira, C. Pajares and N. S. Amelin, Proceedings of *The heart of the matter*, Eds. J.-F. Mathiot and J. Tran Thanh Van, Editions Frontières, Singapore 1995, p. 519–523.
4. “String fusion and antibaryon enhancement”, by N. Armesto, M. A. Braun, E. G. Ferreira and C. Pajares, Proceedings of the *International Symposium on Strangeness and Quark Matter*, Eds. G. Vassiliadis, A. D. Panagiotou, S. Kumar and J. Madsen, World Scientific, Singapore 1995, p. 169–174.
5. “Fusion of strings and particle spectra”, by N. Armesto, M. A. Braun, E. G. Ferreira and C. Pajares, Proceedings of the *XXIV International Symposium on Multiparticle Dynamics*, Eds. A. Giovannini, S. Lupia and R. Ugoccioni, World Scientific, Singapore 1995, p. 199–208.
6. “Quark Gluon Plasma and long and short range correlations”, by N. S. Amelin, N. Armesto, M. A. Braun, E. G. Ferreira and C. Pajares, Proc. of the *IX International Workshop on High Energy Physics and Quantum Field Theory*, Ed. B. B. Levchenko, Moscow 1995, p. 346–350.
7. “Long and short range correlations as a signature of string fusion”, by N. Armesto, E. G. Ferreira, C. Pajares and M. A. Braun, Proceedings of the *XXXth Rencontres de Moriond*, Ed. J. Tran Thanh Van, Editions Frontières, Singapore 1995, p. 575–576.
8. “String Fusion Model: multiplicity and strangeness production in nucleus–nucleus collisions. A possible relation with cosmic ray composition”, by N. Armesto, E. G. Ferreira, C. Pajares and M. A. Braun, Proceedings of the *VIIIth Blois Workshop on Elastic and Diffractive Scattering: Frontiers in Strong Interactions*, Eds. P. Chiappetta, M. Haguenaer and J. Tran Thanh Van, Editions Frontières, Singapore 1996, p. 135–138.
9. “Correlations and Strangeness Enhancement in Heavy Ion Collisions in the String Fusion Model”, by N. Armesto, E. G. Ferreira, C. Pajares and M. A. Braun, Proceedings of the *International Europhysics Conference on High Energy Physics*, Eds. J. Lemonne, C. Vander

Velde and F. Verbeure, World Scientific, Singapore 1996, p. 359–360.

10. “Fusion of strings and heavy ion collisions”, by N. Armesto, M. A. Braun, E. G. Ferreira and C. Pajares, *Hadronic J. Suppl.* 15 (2000) 1–42.

11. “Fusion of strings and cosmic rays at ultrahigh energies”, by N. Armesto, E. G. Ferreira, C. Pajares, M. A. Braun and Yu. M. Shabelski, *Proceedings of the XXXIst Rencontres de Moriond*, Ed. J. Tran Thanh Van, Editions Frontières, Singapore 1996, p. 471–476.

12. “Fusion of strings: consequences at the highest cosmic ray energies”, by N. Armesto, M. A. Braun, E. G. Ferreira, C. Pajares and Yu. M. Shabelski, *Nucl. Phys. B (Proc. Suppl.)* 52B (1997) 126–128.

13. “Percolation approach and J/ψ suppression in the String Fusion Model”, by N. Armesto, M. A. Braun, E. G. Ferreira and C. Pajares, *Proceedings of the RHIC Summer Study '96*, Eds. D. E. Kahana and Y. Pang, Brookhaven National Laboratory, Upton 1996, p. 229–233.

14. “Fusion of strings, cosmic rays and J/ψ suppression”, by N. Armesto, E. G. Ferreira, C. Pajares and M. A. Braun, *Proceedings of the XXVI International Symposium on Multiparticle Dynamics*, Eds. J. Dias de Deus, P. Sá, M. Pimenta, S. Ramos and J. Seixas, World Scientific, Singapore 1997, p. 155–166.

15. “Cumulative effect: particle production outside the kinematical limits in proton–nucleus and nucleus–nucleus collisions”, by N. Armesto, M. A. Braun, E. G. Ferreira and C. Pajares, *Proceedings of the XIIIth International Seminar on High Energy Physics Problems (Dubna, Russia, September 1996)* to appear.

16. “Interpretations of J/ψ suppression”, by N. Armesto, *Proceedings of the XXXIInd Rencontres de Moriond*, Ed. J. Tran Thanh Van, Editions Frontières, Paris 1997, p. 519–524.

17. “Hard processes on nuclear targets in QCD”, by N. Armesto, C. Pajares, C. A. Salgado and Yu. M. Shabelski, *Proceedings of the XXXIInd Rencontres de Moriond*, Ed. J. Tran Thanh Van, Editions Frontières, Paris 1997, p. 409–412.

18. “Fast antibaryon production in pp collisions and string fusion”, by N. Armesto, E. G. Ferreira, C. Pajares and Yu. M. Shabelski, *Proceedings of the 3rd International Workshop On Diquarks And Other Models Of Compositeness (DIQUARKS III)*, Eds. M. Anselmino and E. Predazzi, World Scientific, Singapore 1998, p. 228–237.

19. “Interpretations of J/ψ suppression”, by N. Armesto and A. Capella, *J. Phys. G*23 (1997) 1969–1977.

20. “On the odderon intercept in QCD”, by N. Armesto and M. A. Braun, *Proceedings of the Madrid Workshop on low x Physics*, Eds. F. Barreiro, L. Labarga and J. del Peso, World Scientific, Singapore 1998, p. 243–248.

21. “Nuclear effects in QCD”, by N. Armesto, preprint DESY 98–040 (hep-ph/9803495),

- Proceedings of the *5th International Workshop on Hard Probes in Nuclear Collisions* (Lisbon, Portugal, September 1997) to appear in *Int. J. Mod. Phys. A*.
22. “ J/ψ Suppression in the Framework of the Dual Parton Model”, by N. Armesto, A. Capella and E. G. Ferreiro, Proceedings of the *XXXIIIrd Rencontres de Moriond*, Ed. J. Tran Thanh Van, Editions Frontières, Paris 1998, p. 545–552.
23. “Anomalous J/ψ Suppression in Lead–Lead Collisions: Is There a Break in the J/ψ Cross–Section?”, by N. Armesto, A. Capella and E. G. Ferreiro, Proceedings of the *RHIC/INT Workshop on Quarkonium Production in Relativistic Nuclear Collisions*, Eds. X.–N. Wang and B. Jacak, World Scientific, Singapore 1999, p. 63–74.
24. “Rescattering effects in heavy flavour production off nuclei”, by M. A. Braun, C. Pajares, C. A. Salgado, N. Armesto and A. Capella, *Nucl. Phys. B (Proc. Suppl.)* 71B (1999) 254–258.
25. “Consequences of the percolation of strings for the behavior of forward-backward correlations”, by N. Armesto, M. A. Braun, E. G. Ferreiro and C. Pajares, *Nucl. Phys. A* 661 (1999) 325c–328c.
26. “On the NLL corrections to the BFKL Pomeron”, by N. Armesto, J. Bartels and M. A. Braun, Proceedings of the *XIth Rencontres de Blois: Frontiers of Matter*, Ed. J. Tran Thanh Van, World Scientific, Hanoi 2001, p. 247–249.
27. “String Fusion Model with two components at RHIC and LHC”, by N. Armesto, C. Pajares and D. Sousa, Proceedings of the *XIth Rencontres de Blois: Frontiers of Matter*, Ed. J. Tran Thanh Van, World Scientific, Hanoi 2001, p. 603–606.
28. “String Fusion Model predictions for RHIC and LHC”, by N. Armesto, C. Pajares and D. Sousa, Proceedings of the *XVII Autumn School: QCD: Perturbative or Nonperturbative*, Eds. L. S. Ferreira, P. Nogueira and J. I. Silva–Marcos, World Scientific, Singapore 2001, p. 319–324.
29. “Heavy Flavor Production in Nuclear Collisions”, by N. Armesto, M. A. Braun, A. Capella, C. Pajares and C. A. Salgado, *Nucl. Phys. B (Proc. Suppl.)* 93 (2001) 234–237.
30. “Strangeness Production in the String Fusion Model”, by N. S. Amelin, N. Armesto, C. Pajares and D. Sousa, Proceedings of the *IVth Rencontres de Vietnam* (Hanoi, Vietnam, July 2000) to appear.
31. “ J/ψ suppression at SPS and RHIC in the comovers approach”, by N. Armesto, A. Capella, E. G. Ferreiro, A. B. Kaidalov and D. Sousa, *Nucl. Phys. A* 698 (2002) 583c–586c.
32. “Partonic densities in the nucleus at small x in the perturbative QCD”, by N. Armesto and M. A. Braun, *Nucl. Phys. A* 699 (2002) 320c–323c.
33. “Jet and Dijet Rates in pA Collisions”, by A. Accardi and N. Armesto, contribution to the CERN Yellow Report on *Hard Probes in Heavy Ion Collisions at the LHC*, CERN–2004–009 (hep-ph/0211313 and hep-ph/0308248), p. 50–58.

34. “Jet and Dijet Rates in AB Collisions”, by A. Accardi, N. Armesto and I. P. Lokhtin, contribution to the CERN Yellow Report on *Hard Probes in Heavy Ion Collisions at the LHC*, CERN–2004–009 (hep-ph/0211314 and hep-ph/0310274), p. 125–129.
35. “Gluon distributions in nuclei at small x : guidance from different models”, by N. Armesto and C. A. Salgado, contribution to the CERN Yellow Report on *Hard Probes in Heavy Ion Collisions at the LHC*, CERN–2004–009 (hep-ph/0301200 and hep-ph/0308248), p. 29–32.
36. “Nuclear Structure Functions at Small x in Multiple Scattering Approaches”, by N. Armesto, Proceedings of the *XXXVIIIth Rencontres de Moriond: QCD and Hadronic Interactions* (Les Arcs, France, March 2003), Eds. É. Augé and J. Tran Thanh Van, Thé Giói Publishers, Hanoi 2003, p. 293–296.
37. “Nuclear structure functions at small x from inelastic shadowing and diffraction”, by J. L. Albacete, N. Armesto, A. Capella, A. B. Kaidalov and C. A. Salgado, Proceedings of the *XXXVIIIth Rencontres de Moriond: QCD and Hadronic Interactions* (Les Arcs, France, March 2003), Eds. É. Augé and J. Tran Thanh Van, Thé Giói Publishers, Hanoi 2003, p. 297–300.
38. “Collective behaviour in nuclear interactions and shower development”, by V. Canoa, N. Armesto, C. Pajarez and R. A. Vázquez, Proceedings of the *28th International Cosmic Ray Conference* (Tsukuba, Japan, August 2003), Eds. T. Kajita, Y. Asaoka, A. Kawachi, Y. Matsubara and M. Sasaki, Universal Academy Press, Tokyo 2003 (Frontiers Science Series, No. 41, 43), p. 1619–1622.
39. “Introduction to Low x Physics and Saturation”, by N. Armesto, *Acta Phys. Polon.* B35 (2004) 213–221.
40. “Gluon Radiation off Massive Quarks in a QCD Medium”, by N. Armesto, C. A. Salgado and U. A. Wiedemann, Proceedings of the *XXXIXth Rencontres de Moriond: QCD and Hadronic Interactions* (La Thuile, Italy, March–April 2004), Eds. É. Augé y J. Tran Thanh Van, Thé Giói Publishers, Hanoi 2004, p. 325–328.
41. “Review of Monte Carlo methods for particle multiplicity evaluation”, by N. Armesto, Proceedings of *Focus on MULTIPLICITY: International Workshop on Particle Multiplicity in Relativistic Heavy Ion Collisions* (Bari, Italy, June 2004), *J. Phys. Conf.* 5 (2005) 219–229.
42. “Jet quenching”, by N. Armesto, Proceedings of *Physics at LHC* (Vienna, Austria, July 2004), *Czech. J. Phys.* 55 (2005) B325–B332.
43. “Nuclear Shadowing and Diffraction”, by J. L. Albacete, N. Armesto, A. Capella, A. B. Kaidalov and C. A. Salgado, Proceedings of the *Eighth Workshop on Non-Perturbative Quantum Chromodynamics* (Paris, France, June 2004), *Int. J. Mod. Phys. A*20 (2005) 4436–4441.
44. “Flow effects on jet profiles and multiplicities”, by N. Armesto, Proceedings of *Hard Probes*

- 2004: *International Conference on Hard and Electromagnetic Probes of High Energy Nuclear Collisions* (Ericeira, Portugal, November 2004), Eur. Phys. J. C43 (2005) 255-258.
45. “Nuclear size and rapidity dependence of the saturation scale from QCD evolution and experimental data”, by J. L. Albacete, N. Armesto, J. G. Milhano, C. A. Salgado and U. A. Wiedemann, Proceedings of *Hard Probes 2004: International Conference on Hard and Electromagnetic Probes of High Energy Nuclear Collisions* (Ericeira, Portugal, November 2004), Eur. Phys. J. C43 (2005) 353-360.
46. “Heavy-to-light ratios as a test of medium-induced energy loss at RHIC and the LHC”, by N. Armesto, M. Cacciari, A. Dainese, C. A. Salgado and U. A. Wiedemann, Proceedings of *Quark Matter 2005: 18th International Conference on Ultra-Relativistic Nucleus-Nucleus Collisions* (Budapest, Hungary, August 2005), Nucl. Phys. A774 (2006) 589–592.
47. “High transverse momentum physics in heavy ion collisions”, by N. Armesto, Proceedings of the *HEP2005 International Europhysics Conference on High Energy Physics* (Lisbon, Portugal, July 2005), Proceedings of Science (HEP2005) 134-1–134-4.
48. “Heavy-quark energy loss at RHIC and LHC”, by N. Armesto, M. Cacciari, A. Dainese, C. A. Salgado and U. A. Wiedemann, Proceedings of *PANIC05: Particles and Nuclei International Conference* (Santa Fe, USA, October 2005), AIP Conf. Proc. 842 (2006) 74–76.
49. “Testing radiative energy loss at RHIC and the LHC”, by N. Armesto, Proceedings of the *Fifth International Conference on Perspectives in Hadronic Physics: Particle-Nucleus and Nucleus-Nucleus Scattering at Relativistic Energies* (ICTP Trieste, Italy, May 2006), Nucl. Phys. A782 (2007) 242c–250c.
50. “Flow effects on jet profile”, by N. Armesto, Proceedings of the *2nd International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions* (Monterey, USA, June 2006), Nucl. Phys. A783 (2007) 133c–140c.
51. “Hard Processes in Heavy Ion Collisions”, by N. Armesto, Proceedings of the *XXXIII International Conference on High Energy Physics (ICHEP’06)* (Moscow, Russia, July-August 2006), to appear.
52. “First correction to JIMWLK evolution from the classical equations of motion”, by J. L. Albacete, N. Armesto and J. G. Milhano, Proceedings of the *19th International Conference on Ultra-Relativistic Nucleus-Nucleus Collisions (QM2006)* (Shanghai, China, November 2006), J. Phys. G34 (2007) S623-S626.
53. “ p_t -multiplicity correlations in a multi-pomeron exchange model with string collective effects”, by N. Armesto, D. Derkach and G. Feofilov, ALICE internal note ALICE-INT-2006-031.
54. “Theoretical Uncertainty in the Tau Energy Loss”, by N. Armesto, C. Merino, G. Parente

and E. Zas, Proceedings of the *30th International Cosmic Ray Conference (ICRC'07)*, (Mérida, Yucatán, México, July 2007).

55. “Predictions for the LHC: an Overview”, by N. Armesto, Proceedings of the *20th International Conference on Ultra-Relativistic Nucleus-Nucleus Collisions (QM2008)* (Jaipur, India, February 2008), J. Phys. G35 (2008) 104042.

56. “Small- x Physics and the Detection of UHE Neutrinos”, by N. Armesto, C. Merino, G. Parente and E. Zas, proceedings of the *XLIII Rencontres de Moriond: QCD and High Energy Hadronic Interactions* (La Thuile, Italy, March 2008), preprint arXiv:0805.2247 [hep-ph].

57. “Medium-modified fragmentation functions”, by N. Armesto, L. Cunqueiro, C. A. Salgado and W.-C. Xiang, J. Phys. Conf. Ser. 110 (2008) 032001.

58. “Implementation of a medium-modified parton shower algorithm”, by N. Armesto, L. Cunqueiro and C. A. Salgado, Eur. Phys. J. C61 (2009) 775-778.

59. “Medium dependence of multiplicity distributions in MLLA”, by N. Armesto, C. Pajares and P. Quiroga-Arias, Eur. Phys. J. C61 (2009) 779-784.

60. “Jet multiplicity distributions: Medium dependence in MLLA”, by N. Armesto, C. Pajares and P. Quiroga-Arias, Eur. Phys. J. C62 (2009) 151-157.

61. “Q-PYTHIA - a Monte Carlo implementation for jet quenching”, by N. Armesto, L. Cunqueiro and C. A. Salgado, proceedings of the *XLIV rencontres de Moriond: QCD and High-Energy Hadronic Interactions* (La Thuile, Italy, March 2009), preprint arXiv:0906.0754v1 [hep-ph].

62. “Theoretical Progress in Heavy-Ion Collisions”, by N. Armesto, proceedings of the *XVII International Workshop on Deep-Inelastic Scattering and Related Subjects DIS 2009* (Madrid, Spain, April 2009), doi:10.3360/dis.2009.7.

63. “Monte Carlo for Jet Showers in the Medium”, by N. Armesto, L. Cunqueiro and C. A. Salgado, Nucl. Phys. A830 (2009) 271c-274c.

64. “Small- x physics at the LHeC”, by N. Armesto, proceedings of the *XVIII International Workshop on Deep-Inelastic Scattering and Related Subjects DIS 2010* (Florence, Italy, April 2010), PoS (DIS 2010) 255.

65. “Small- x physics at the Large Hadron-electron Collider”, by N. Armesto, proceedings of the workshop *Light Cone 2010* (Valencia, Spain, June 2010). PoS (LC2010) 046.

66. “Small- x physics at the Large Hadron-electron Collider”, by N. Armesto, proceedings of the *4th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions (HP2010)* (Eilat, Israel, October 2010), Nucl. Phys. A855 (2011) 482-485.

67. “eA collisions at the Large Hadron-electron Collider”, by N. Armesto, proceedings of the *XXII International Conference on Ultrarelativistic Nucleus-Nucleus Collisions - Quark Matter*

2011 (Annecy, France, May 2011), J. Phys. G38 (2011) 124127.

68. “AAMQS: a nonlinear QCD description of new HERA data at small- x ”, by P. Quiroga-Arias, J. L. Albacete, N. Armesto, J. G. Milhano and C. A. Salgado, proceedings of the *XXII International Conference on Ultrarelativistic Nucleus-Nucleus Collisions - Quark Matter 2011* (Annecy, France, May 2011), J. Phys. G38 (2011) 124124.

69. “Mass effect and coherence in medium-induced QCD radiation off a $q\bar{q}$ antenna”, by N. Armesto, H. Ma, Y. Mehtar-Tani, C. A. Salgado and K. Tywoniuk, proceedings of the *XXII International Conference on Ultrarelativistic Nucleus-Nucleus Collisions - Quark Matter 2011* (Annecy, France, May 2011), J. Phys. G38 (2011) 124140.

70. “Broadening in Medium-induced QCD Radiation off a $q\bar{q}$ Antenna”, by N. Armesto, H. Ma, Y. Mehtar-Tani, C. A. Salgado and K. Tywoniuk, proceedings of the *19th Particles and Nuclei International Conference (PANIC11)* (Boston, USA, July 2012), AIP Conf. Proc. 1441 (2012) 263-267.

71. “Small- x Physics Opportunities with a Large Hadron-Electron Collider at CERN”, by N. Armesto, proceedings of the *19th Particles and Nuclei International Conference (PANIC11)* (Boston, USA, July 2012), AIP Conf. Proc. 1441 (2012) 871-873.

72. “QCD at an electron-hadron collider at CERN: the LHeC project”, by N. Armesto, proceedings of the workshop *LC11: understanding QCD at Linear Colliders in searching for old and new physics* (Trento, Italy, September 2011), Frascati Physics Series, Volume LIV, 2012, p. 22-31.

73. “Physics at low x_{Bj} and in eA at the LHeC”, by N. Armesto, proceedings of the conference *International Conference on Heavy Ion Collisions in the LHC Era* (Quy Nhom, Vietnam, July 2012), Journal of Physics: Conference Series 422 (2013) 012030.

74. “Summary Talk”, by N. Armesto, proceedings of the conference *International Conference on Heavy Ion Collisions in the LHC Era* (Quy Nhom, Vietnam, July 2012), Journal of Physics: Conference Series 422 (2013) 012032.

Courses given:

– “Hadron Phenomenology: QCD and Nuclear Collisions”, given at the *Taller de Altas Energías* (Universidade de Santiago de Compostela, Spain, September 2004).

– “Numerical methods in high gluon density QCD”, given at the *Block Course: QCD at high energies - from DIS to HIC* (Universität Bielefeld, Germany, September-October 2004).

– “Hard Probes (theory)”, given at the *International School on Quark-Gluon Plasma and Heavy Ion Collisions: past, present, future* (Torino, Italia, May 2005).

– “Testing the Color Glass Condensate at RHIC and at the LHC”, given at the *ECT* Doctoral Training Programme 2008: Nuclear Matter under Extreme Conditions* (ECT*, Trento, Italy,

May 2008).

- “Introductory course on QCD in heavy ion collisions”, given, together with Carlos A. Salgado, at the Universidade de Santiago de Compostela in October-November 2008.
- “Dense QCD matter”, given at the *PASC Winter School 2008*, held in Sesimbra, Portugal, in December 2008.
- “Nuclear modification of the parton distribution functions”, given at the *Scuola di Dottorato di Ricerca in Fisica* at the Dipartimento di Fisica “Galileo Galilei”, Università degli studi di Padova e INFN Sezione di Padova, in Padova, Italy, in May 2009.
- 4 lectures: “Introduction to Heavy Ion Physics (Theory)” I and II, “Gluon Saturation” and “Hard Probes (Theory)”, within the Doctorate Courses at the National Centre for Subatomic Physics (Nikhef), in Nikhef, Amsterdam, in June 2009.
- “Physics of e -A scattering”, within the *Lectures on QCD and the introduction to the Physics of EIC for students* at the *EIC meeting at Stony Brook*, in Stony Brook, USA, in January 2010.
- “Theoretical review of hard probes”, given at the *Student lectures in the 4th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions (HP2010)*, in Eilat, Israel, in October 2010.
- “Heavy-Ion Collisions” (3 hours), at the *Spanish Graduate School on High Energy Physics 2011* at the University of the Basque Country, Bilbao, in July 2011.
- “QCD at the Large Hadron Electron Collider at CERN”, at the *International Spring School of the GDR PH-QCD: QCD prospects for future ep and eA colliders* at the LPT, Orsay, France, June 2012.
- “Proton-Nucleus collisions at LHC and Electron-Nucleus collisions at an EIC”, at the *Student Day at the 23rd International Conference on Ultra-Relativistic Nucleus-Nucleus Collisions (Quark Matter 2012)* in Washington D.C., USA, August 2012.
- “Quantum Chromodynamics” (3 hours), at the *Third IDPASC School*, in Santiago de Compostela, Spain, January 2013.
- “Heavy-Ion Collisions” (4.5 hours), given at the Department of Physics at Ben Gurion University of the Negev, Beer Sheva, Israel, in March and May 2015.
- “Hadron structure phenomenology at an EIC” (3 hours), given at the *Indian Summer School of Physics on Phenomenology of Hot and Dense Matter for Future Accelerators*, Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University Prague, September 3rd-7th 2018.
- “Hadronic structure in electron-hadron/nucleus colliders” (4 hours), given at the *Summer school on Strong interactions beyond simple factorization: collectivity at high energy from initial to final state*, Department of Physics, University of Connecticut, May 28th-29th 2019.

– “EIC, a theorist’s perspective” (4 hours), given at the *UConn-NSF summer school on saturation and EIC*, Department of Physics, University of Connecticut, August 2nd-5th 2023.

Seminars given:

– “Difracción en el modelo de fusión de cuerdas”, given at the Departamento de Física de Partículas of the Universidade de Santiago de Compostela (Spain) in May 1993.

– “The EMC effect at low x and the pomeron–pomeron cross section in the hard pomeron approach”, given at the Departamento de Física de Partículas of the Universidade de Santiago de Compostela (Spain) in October 1996.

– “The EMC effect at low x and the pomeron–pomeron cross section in the hard pomeron approach”, given at the Departament de Estructura i Constituents de la Matèria of the Universitat de Barcelona (Spain) in October 1996.

– “Collective effects in nucleus–nucleus collisions: string fusion”, given at the Laboratoire de Physique Théorique et Hautes Energies of the Université de Paris XI (France) in February 1997.

– “Interpretations of J/ψ suppression in nuclear collisions”, given at DESY Hamburg (Germany) in April 1997.

– “Interpretations of J/ψ suppression in nuclear collisions”, given at the Departamento de Física de Partículas of the Universidade de Santiago de Compostela (Spain) in May 1997.

– “Interpretations of J/ψ suppression in nuclear collisions”, given at the Fakultät für Physik, Universität Bielefeld (Germany) in June 1997.

– “Algunos aspectos de la interacción fuerte”, given at the Facultad de Ciencias of the Universidad de Córdoba (Spain) in September 1997.

– “Charmonium suppression in nuclear collisions”, given at the Institute de Physique Nucleaire de la Université de Paris XI (France) in December 1997.

– “On the odderon intercept in QCD”, given at the Service de Physique Théorique, Centre d’Etudes de Saclay (France) in December 1997.

– “Questions on BFKL at NLL”, given at the Departamento de Física de Partículas of the Universidade de Santiago de Compostela (Spain) in February 1999.

– “A geometrical approach to saturation of partonic densities”, given at the Departamento de Física Teórica y del Cosmos of the Universidad de Granada (Spain) in December 2000.

– “Estructura íntima de la materia”, given at the Centro de Profesorado “Luisa Revuelta” in Córdoba in May 2001.

– “First RHIC Results and the String Fusion Model”, given at the Bartol Research Center, University of Delaware, in May 2002.

– “Multiplicities in high-energy nuclear collisions: How to compute them?”, given at the Physics Department, Brookhaven National Laboratory, in May 2002.

- “NLO QCD predictions for Jet and Dijet Rates in Nuclear Collisions at the LHC”, given at CERN, Switzerland, in February 2003.
- “Saturation in nuclear collisions”, given at CERN, Switzerland, in March 2003.
- “Models for nuclear structure functions at small x ”, given at the Institute for Nuclear Theory, University of Washington, Seattle, in April 2003.
- “BFKL at High Parton Densities: Numerical Results”, given at CERN, Switzerland, in September 2003.
- “BFKL at High Parton Densities: Numerical Results”, given at the Departamento de Física de Partículas of the Universidade de Santiago de Compostela, in October 2003.
- “Saturation in nuclear collisions: what are we learning from RHIC?”, given at the Departamento de Física Teórica y del Cosmos of the Universidad de Granada, in October 2003.
- “Medium-Induced Parton Energy Loss for Heavy Quarks”, given at CERN, Switzerland, in December 2003.
- “Effects of Medium-Induced Gluon Radiation on Jet Shapes and Heavy Flavors”, given at the Physics Department, Brookhaven National Laboratory, in March 2004.
- “Jet Properties in Heavy Ion Collisions”, given at the Departamento de Física de Partículas of the Universidade de Santiago de Compostela, in May 2004.
- “Saturation in High-Energy Nuclear Collisions”, given at DESY, Hamburg, in May 2004.
- “Dense partonic matter at RHIC”, given at the Departament de Estructura i Constituents de la Matèria of the Universitat de Barcelona, Spain, in November 2004.
- “New theoretical ideas on jet quenching”, given at CERN, Switzerland, in December 2004.
- “Highlights of Quark Matter 2005”, given at the Departamento de Física de Partículas of the Universidade de Santiago de Compostela, in November 2005.
- “O Modelo Estándar das Partículas Elementais”, given at the masterclass *Hands on Particle Physics 2006* held at the Facultade de Física of the Universidade de Santiago de Compostela, in March 2006.
- “Jet quenching and AdS/CFT”, given at CENTRA in the Instituto Superior Técnico of the Universidade Técnica de Lisboa, in December 2006.
- “Hard Probes in Heavy Ion Collisions”, given at CERN, Switzerland, in March 2007.
- “Jet quenching”, given at the Laboratoire de Physique Théorique et des Hautes Énergies, Universités Paris VI et VII, in November 2007.
- “Ultra-Relativistic Heavy Ion Collisions: Why and Where”, given at the Indian Institute of Technology, Mumbai, India, in February 2008.
- “Characterizing the medium produced in heavy ion collisions through jets”, given at St. Petersburg State University, St. Petersburg, Russia, in November 2008.

- “From ep and eA to AA”, given at St. Petersburg State University, St. Petersburg, Russia, in November 2008.
- “Parton densities in nuclei”, given at the Università degli Studi di Padova, Padova, Italy, in November 2008.
- “Heavy-ion collisions at the dawn of the LHC”, given at the University of Connecticut, Storrs, US, in August 2011.
- “QCD at an electron-hadron collider at CERN: the LHeC project”, given at the Centre de Physique Théorique, Ecole Polytechnique, Palaiseau, France, in December 2011.
- “Á procura do bosón de Higgs (unha introducción para non expertos)”, given at the Facultade de Física, Universidade de Santiago de Compostela, Spain, in December 2011.
- “The Large Hadron electron Collider at CERN”, given at the University of Connecticut, Storrs, US, in August 2014.
- “Lepton-Hadron Scattering and the High-Energy Frontier”, given at the Department of Physics of the Ben Gurion University of the Negev, Beer Sheva, Israel, in March 2015.
- “Some recent theoretical issues in Heavy-Ion Physics”, given at the School of Physics and Astronomy, University of Birmingham, Birmingham, UK, in July 2015.
- “Plans for future electron-proton/ion colliders”, given at the Department of Fundamental Research, National Centre for Nuclear Research, Poland, in June 2020.

Talks given:

- “Quark Gluon Plasma and long and short range correlations”, given at the *IX International Workshop on High Energy Physics and Quantum Field Theory* (Zvenigorod, Russia, September 1994).
- “Long and short range correlations as a signature of string fusion”, given at the *XXXth Rencontres de Moriond* (Les Arcs, France, March 1995).
- “Correlations and strangeness enhancement in heavy ion collisions in the String Fusion Model”, given at the *International Europhysics Conference on High Energy Physics* (Brussels, Belgium, July–August 1995).
- “Fusion of strings: consequences at the highest cosmic ray energies”, given at the *IXth International Symposium on Very High Energy Cosmic Ray Interactions* (Karlsruhe, Germany, August 1996).
- “Percolation in the String Fusion Model” (invited), given at the *Rencontres de Théoriciens* (Clermont–Ferrand, France, January 1997).
- “Interpretations of J/ψ suppression” (invited), given at the *XXXIInd Rencontres de Moriond* (Les Arcs, France, March 1997).

- “On the odderon intercept in QCD”, given at the *Madrid Workshop on low x Physics* (Miraflores de la Sierra, Spain, June 1997).
- “Nuclear effects in QCD” (invited), given at the *Vth International Workshop on Hard Probes in Nuclear Collisions* (Lisbon, Portugal, September 1997).
- “On the NLL corrections to the BFKL Pomeron”, given at the *XIth Rencontres de Blois: Frontiers of Matter* (Blois, France, June–July 1999).
- “Percolation, collectivity and multiplicity predictions for RHIC and LHC”, given at the *Workshop on Percolation and Related Topics* (Santiago de Compostela, Spain, February 2000).
- “Initial stage in the string fusion model”, given at the *OSCAR III Workshop* (Nantes, France, June 2000).
- “Central rapidity densities of charged particles in AB collisions at LHC” (invited), given at the *5th CMS Heavy Ion Meeting* (Gatchina, Russia, June 2000).
- “Heavy Flavor Production in Nuclear Collisions”, given at the *IVth International Conference on Hyperons, Charm and Beauty Hadrons* (Valencia, Spain, June 2000).
- “String models: multiplicity predictions in AB collisions at RHIC and LHC” (invited), given at the *Workshop at CERN on Heavy Ion Physics at the LHC* (CERN, Geneva, November 2000).
- “Percolation of strings in high energy hadronic collisions” (invited), given at the *Workshop on Percolation Phenomena: Basic Techniques and Applications* (Bielefeld, Germany, May 2001).
- “Some aspects on percolation: J/ψ suppression and relation to parton saturation”, given at the *Informal Meeting on Percolation and Heavy Ion Collisions* (Lisbon, Portugal, November 2001).
- “Jets: Benchmark results for p+A and A+A” (invited), given at the *Third Meeting of the 2002 CERN Workshop on Hard Probes in Heavy Ion Collisions at the LHC* (CERN, Geneva, Switzerland, October 2002).
- “Particle Multiplicities at High Energies” (invited), given at the *Colloque en l’honneur de Alfons Capella, André Krzywicki et Jean Tran Thanh Van: Interactions fondamentales et Physique Hadronique* (Orsay, France, October 2002).
- “Different Approaches to Nuclear Structure Functions at Small x ”, given at the *Workshop on Heavy Ions and Cosmic Rays* (Santiago de Compostela, Spain, February 2003).
- “Nuclear structure functions at small x in multiple scattering approaches”, given at the *XXXVIIIth Rencontres de Moriond: QCD and Hadronic Interactions*, (Les Arcs, France, March 2003).
- “Heavy flavor production and absorption in pA collisions” (invited), given at the *NA60 Collaboration Meeting* (Lisbon, Portugal, June 2003).
- “Numerical Results on Non-Linear Evolution and Scaling”, given at the *ECT* Workshop on*

- Color Glass Condensate and Parton Percolation* (Trento, Italy, June 2003).
- “Tools for Heavy Ion physics” (invited plenary), given at the *CERN Workshop on Monte Carlo Tools for the LHC* (CERN, Geneva, Switzerland, July 2003).
 - “PSM”, given at the *CERN Workshop on Monte Carlo Tools for the LHC* (CERN, Geneva, Switzerland, July 2003).
 - “Introduction to Low x Physics and Saturation” (invited plenary), given at the *XXXIII International Symposium on Multiparticle Dynamics* (Krakow, Poland, September 2003).
 - “Some aspects of non-linear evolution”, given at the *Heavy Ion Meeting* (Faro, Portugal, October 2003).
 - “Evolution Equations of QCD in the Non-Linear Saturation Region” (invited), given at the *Second Electron-Ion Collider Workshop* (Jefferson Lab, Newport News, Virginia, USA, March 2004).
 - “Gluon radiation off massive quarks in a QCD medium”, given at the *XXXIXth Rencontres de Moriond: QCD and Hadronic Interactions* (La Thuile, Italy, March-April 2004).
 - “Nuclear Shadowing and Diffraction” (invited), given at the *Eighth Workshop on Non-Perturbative Quantum Chromodynamics* (Paris, France, June 2004).
 - “Saturation in ultra-relativistic heavy ion collisions at the LHC” (invited), given at the *CMS Heavy Ion Physics Workshop* (CERN, Geneva, Switzerland, June 2004).
 - “Review of Monte Carlo methods for particle multiplicity evaluation” (invited), given at *Focus on MULTIPLICITY: International Workshop on Particle Multiplicity in Relativistic Heavy Ion Collisions* (Bari, Italy, June 2004).
 - “Jet quenching” (invited), given at *Physics at LHC* (Vienna, Austria, July 2004).
 - “Geometric scaling: Phenomenology vs. results from BK” (invited), given at the *BRAHMS Workshop on Forward Physics* (Lawrence, Kansas, USA, October 2004).
 - “Flow effects on jet profiles and multiplicities”, given at *Hard Probes 2004: International Conference on Hard and Electromagnetic Probes of High Energy Nuclear Collisions* (Ericeira, Portugal, November 2004).
 - “Testing radiative energy loss at RHIC and LHC”, given at the *7th Meeting on Percolation and Related Subjects* (Lisbon, Portugal, April 2005).
 - “Jet Rates in p+A Collisions at the LHC”, given at the *Workshop on Proton-Nucleus Collisions at the LHC* (CERN, Geneva, Switzerland, May 2005).
 - “High transverse momentum physics in heavy ion collisions” (invited), given at the *HEP2005 International Europhysics Conference on High Energy Physics* (Lisbon, Portugal, July 2005).
 - “Heavy-to-light ratios as a test of medium-induced energy loss at RHIC and the LHC”, given at the *Quark Matter 2005: 18th International Conference on Ultra-Relativistic Nucleus-Nucleus*

Collisions (Budapest, Hungary, August 2005).

- “Hard processes in heavy ion collisions: from RHIC to the LHC”, given at the *ALICE-EELA Meeting* (Madrid, Spain, May 2006).
- “Testing radiative energy loss at RHIC and at the LHC” (invited), given at the *Fifth International Conference on Perspectives in Hadronic Physics: Particle-Nucleus and Nucleus-Nucleus Scattering at Relativistic Energies* (ICTP Trieste, Italy, May 2006).
- “Testing radiative energy loss at RHIC and at the LHC”, given at the *IVth International Conference on Quarks and Nuclear Physics* (Madrid, Spain, June 2006).
- “Flow effects on jet profile” (invited plenary), given at the *2nd International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions* (Monterey, USA, June 2006).
- “Numerical studies of correlation and discreteness in non-linear QCD evolution”, given at the *Low x Meeting* (Lisbon, Portugal, June-July 2006).
- “Parton saturation and string percolation”, given at the *Informal Meeting on Astroparticle Physics* (Santiago de Compostela, July 2006).
- “Hard Processes in Heavy Ion Collisions” (invited), given at the *XXXIII International Conference on High Energy Physics ICHEP’06* (Moscow, Russia, July-August 2006).
- “Modelling final state radiation in a QCD medium”, given at the *ECT International Workshop on Heavy Flavor Physics in Heavy Ion Collisions at the LHC* (Trento, Italy, September 2006).
- “First correction to JIMWLK evolution from the classical EOMs”, given at the *19th International Conference on Ultra-Relativistic Nucleus-Nucleus Collisions (QM2006)* (Shanghai, China, November 2006).
- “Jet quenching and AdS/CFT” (invited), given at the *Workshop on AdS/CFT and strongly coupled quark matter* (Beijing, China, November 2006).
- “Rapidity correlations in the CGC”, given at the *ECT International Workshop on High energy QCD : from RHIC to LHC* (Trento, Italy, January 2007).
- “Modelling final state radiation in a QCD medium” (invited), given at the *ALICE Physics Week 2007* (Münster, Germany, February 2007).
- “On the determination of the transport coefficient in radiative energy loss formalisms” (invited), given at the *Conference on Early Time Dynamics in Heavy Ion Collisions* (McGill University, Montreal, Canada, July 2007).
- “Review on Heavy Ion Collisions at the LHC - Last Call for Predictions” (invited), given at the *9th Meeting on Percolation and Saturation in Heavy Ion Collisions and Cosmic Rays* (Faro, Portugal, September 2007).
- “Predictions for the LHC: an Overview” (invited plenary), given at the *20th International*

- Conference on Ultra-Relativistic Nucleus-Nucleus Collisions (QM2008)* (Jaipur, India, February 2008).
- “Radiative energy loss: problems and new developments” (invited), given at the workshop *Hot and Dense Matter in the RHIC-LHC era* (Mumbai, India, February 2008).
 - “From eA to AA at RHIC and the LHC” (invited), given at the workshop *Structure of Hadrons and Nuclei at an Electron Ion Collider* (ECT*, Trento, Italy, July 2008).
 - “From ep to AB”, given at the *1st ECFA-CERN LHeC Workshop* (Divonne-les-Bains, France, September 2008).
 - “Q-PYTHIA: A Monte Carlo implementation of medium-induced gluon radiation” (invited), given at the *ALICE-USA Collaboration Meeting* (Berkeley, United States, October 2008).
 - “Characterizing the medium in heavy ion collisions through jets” (invited), given at the *XIII Mexican School of Particles and Fields* (San Carlos, México, October 2008).
 - “Hard probes in heavy-ion collisions at RHIC” (invited plenary), given at the *XIII Mexican School of Particles and Fields* (San Carlos, México, October 2008).
 - “French-Spanish collaboration within the ALICE experiment” (invited), together with G. Martínez, given at the *Meeting IN2P3 - MICINN* (Madrid, Spain, January 2009).
 - “eA collisions at the LHeC”, given at the *LHeC pre-meeting* (Madrid, April 2009).
 - “Theoretical Progress in Heavy-Ion Collisions” (invited plenary), given at the *XVII International Workshop on Deep-Inelastic Scattering and Related Subjects DIS 2009* (Madrid, April 2009).
 - “eA pseudodata”, given at the *LHeC Pre-meeting: Small x and high parton densities* (CERN, Switzerland, June 2009).
 - “Parton densities and jets in high-energy nuclear collisions at the LHC”, given at the *Primera Reunión de la Red Temática de Física del LHC* (Granada, Spain, October 2009).
 - “Small-x physics at the Large Hadron-electron Collider”, given at the *Workshop on nuclear Parton Distribution Functions* (Annecy, France, February 2010).
 - “Small-x physics at the Large Hadron-electron Collider” (invited), given at the *XVIII International Workshop on Deep Inelastic Scattering and Related Subjects - DIS 10* (Florence, Italy, April 2010).
 - “Open heavy flavour production in nuclear collisions” (invited), given at the *XVIII International Workshop on Deep Inelastic Scattering and Related Subjects - DIS 10* (Florence, Italy, April 2010).
 - “LHeC” (invited), given at the *NuPECC LR2010 Town Meeting* (Madrid, Spain, May-June 2010).
 - “Small-x physics at the Large Hadron-electron Collider”, given at the *Workshop on QCD at*

High Density and High Energy (Lisbon, Portugal, June 2010).

- “Small-x physics at the Large Hadron-electron Collider”, given at the workshop *Light Cone 2010* (Valencia, Spain, June 2010).
- “Predictions for the LHC heavy-ion programme: an update” (invited) given at the CERN Theory Institute *The first heavy ion collisions at the LHC - HIC10* (CERN, Switzerland, August-September 2010).
- “Small-x physics at the Large Hadron-electron Collider”, given at the *4th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions (HP2010)* (Eilat, Israel, October 2010).
- “Cold and hot nuclear matter effects on heavy quarks” (invited), given at the *First Rete-Quarkonii Workshop (RQW 2010)* (Nantes, France, October 2010).
- “Overview of the HPD chapter”, given at the *3rd CERN-ECFA-NuPECC Workshop on the LHeC* (Chavannes-de-Bogis, Switzerland, November 2010).
- “Heavy-Ion Physics at the advent of the LHC” (invited), given at the *10a Trobada de Nadal de Física Teorica a la Universitat de Barcelona* (Barcelona, Spain, December 2010).
- “Heavy-Ion Physics at the start of the LHC era” (invited), given at the *XXXIX International Meeting on Fundamental Physics* (Canfranc Underground Laboratory, Spain, February 2011).
- “eA collisions at the Large Hadron-electron Collider”, given at the *XXII International Conference on Ultrarelativistic Nucleus-Nucleus Collisions - Quark Matter 2011* (Annecy, France, May 2011).
- “Small-x physics opportunities with a Large Hadron-electron Collider at CERN”, given at the *19th Particles and Nuclei International Conference (PANIC11)* (Boston, US, July 2011).
- “QCD at an electron-hadron collider at CERN: the LHeC project” (invited), given at *LC11: understanding QCD at Linear Colliders in searching for old and new physics* (Trento, Italy, September 2011).
- “Heavy-Ion Collisions: from RHIC to the First LHC PbPb Run” (invited), given at the *Informal Meeting on Strings and Heavy Ions* (Madrid, Spain, October 2011).
- “Proton-nucleus theory review” (invited), given at the *LPCC Workshop on Prospects of p-Pb collisions during the 2012 LHC HI run* (CERN, Switzerland, October 2011).
- “Heavy-Ion Collisions: from RHIC to the first LHC PbPb Run” (invited), given at the *Workshop on Selected Topics in Theoretical Physics* (Santiago de Compostela, Spain, October 2011).
- “Heavy Ions” (invited plenary), given at the *III CPAN Days* (Barcelona, Spain, November 2011).
- “Low-x Physics in eA scattering at an LHeC”, given at the *XXth International Workshop on*

- Deep-Inelastic Scattering and Related Subjects (DIS 2012)* (Bonn, Germany, March 2012).
- “Nuclear collisions at the LHC: from PbPb to the LHeC” (invited), given at the *XL International Meeting on Fundamental Physics* (Benasque, Spain, May-June 2012).
 - “Physics at low x_{Bj} and in eA” (invited plenary), given at the *2012 CERN-ECFA-NuPECC Workshop on the LHeC* (Chavannes-des-Bogis, Switzerland, June 2012).
 - “Physics at low x_{Bj} and in eA at the LHeC” (invited plenary), given at the conference *Heavy Ion Collisions in the LHC Era* (Quy Nhon, Vietnam, July 2012).
 - “Summary Talk” (invited plenary), given at the conference *Heavy Ion Collisions in the LHC Era* (Quy Nhon, Vietnam, July 2012).
 - “Recent issues on radiative energy loss” (invited), given at the *Open Issues in Heavy-Ion Physics: Symposium in Honor of Guy Paic* (Puebla, México, December 2012).
 - “Electron-ion physics with the LHeC” (invited), given at the *LHeC Miniworkshop at LPCC* (CERN, Switzerland, April 2013).
 - “Low-x Physics at the LHeC”, given at the *XXIst International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2013)* (Marseille, France, April 2013).
 - “WG7 Highlights - Future DIS Experiments: Status of the LHeC” (invited plenary), given at the *XXIst International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2013)* (Marseille, France, April 2013).
 - “Inclusive observables at small-x at the LHeC” given at the *Low x Physics Workshop* (Rehovot-Eilat, Israel, May-June 2013).
 - “Small-x Physics in eA at the LHeC: Understanding the Initial State of Ultrarelativistic Heavy-Ion Collisions”, given at the *25th International Nuclear Physics Conference INPC2013* (Florence, Italy, June 2013).
 - “Coherence effects between initial and final state radiation in a dense QCD medium” (invited), given at the *9th International Workshop on High- p_T Physics at LHC* (Grenoble, France, September 2013).
 - “eA at the LHeC: detector requirements and simulations”, given at the *LHeC Detector Meeting* (CERN, Switzerland, November 2013).
 - “Saturation and small x at the LHeC” (invited), given at the workshop *Ions at the Future Hadron Collider* (CERN, Switzerland, December 2013).
 - “Heavy Ion Physics in e-A and p/A-A” (invited plenary), given at the *2014 LHeC Workshop* (Chavannes-de-Bogis, Switzerland, January 2014).
 - “Small x” (invited), given at the workshop *Ions at the Future Hadron Collider* (CERN, Switzerland, January 2014).
 - “Exclusive vector meson production in the dipole picture” (invited), given at the *ALICE*

- Ultra-Peripheral Collisions meeting* (CERN, Switzerland, June 2014).
- “Review of forward physics in pA and AA” (invited), given at the *Workshop on Implications of LHCb measurements and future prospects* (CERN, Switzerland, October 2014).
 - “Future at the LHC: FCC, LHeC” (invited plenary), given at the *2nd International Conference on the Initial Stages in High-Energy Nuclear Collisions* (Napa, California, USA, December 2014).
 - “Hadron Physics and Heavy-Ion Collisions in Spain” (invited), given at the *Meeting of the Nuclear Physics Division Board of the European Physical Society* (Santiago de Compostela, Spain, April 2015).
 - “Beyond the eikonal approximation in CGC calculations”, given at the workshop *Heavy Ion Collisions at the LHC: the First One Fermi* (Beer Sheva, Israel, May-June 2015).
 - “Nuclear PDFs at the LHeC”, given at the *2015 LHeC Workshop* (CERN and Chavannes-de-Bogis, Switzerland, June 2015).
 - “Summary: Physics and Detector” (invited plenary), given at the *2015 LHeC Workshop* (CERN and Chavannes-de-Bogis, Switzerland, June 2015).
 - “Heavy-Ion Physics (theory)” (invited plenary), given at the *16th conference on Elastic and Diffractive Scattering EDS Blois 2015* (Borgo, France, June-July 2015).
 - “Nuclear PDFs eA collisions at the LHeC”, given at the workshop *QCD@LHC 2015* (London, UK, September 2015).
 - “Small- x Physics at the LHeC”, given at the workshop *QCD@LHC 2015* (London, UK, September 2015).
 - “Small- x Physics at the LHeC” (plenary), given at *POETIC6: 6th International Conference on Physics Opportunities at an ElecTron-Ion Collider* (Palaiseau, France, September 2015).
 - “Nuclear collisions at the Future Circular Collider”, given at the *XXV International Conference on Ultrarelativistic Heavy-ion Collisions Quark Matter 2015* (Kobe, Japan, September 2015).
 - “LHeC status and plans” (invited plenary), given at the *Electron Ion Collider User Group Meeting 2016* (Berkeley, USA, January 2016).
 - “Electron-Ion Physics at the FCC-he”, given at the *FCC Week 2016* (Rome, Italy, April 2016).
 - “Low- x Physics at the FCC-he”, given at the *FCC Week 2016* (Rome, Italy, April 2016).
 - “Theory overview” (invited plenary), given at the *8th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions HP2016* (Wuhan, China, September 2016).
 - “Nuclear PDFs at an EIC” (invited plenary), given at the *Joint CTEQ Meeting and 7th*

- International Conference on Physics Opportunities at an EIC (POETIC 7)* (Philadelphia, USA, November 2016).
- “Small x Physics in ep, eA and pA”, given at the *1st FCC Physics Workshop* (CERN, Switzerland, January 2017).
 - “Small x Physics in ep, eA and pA at the FCC” (invited), given at the *LHC Working Group on Forward Physics and Diffraction* (CERN, Switzerland, March 2017).
 - “Nuclear Physics in eA” (invited), given at the *25th International Workshop on Deep Inelastic Scattering and Related Topics DIS 2017* (Birmingham, UK, April 2017).
 - “Quark correlations in the Color Glass Condensate”, given at the *25th International Workshop on Deep Inelastic Scattering and Related Topics DIS 2017* (Birmingham, UK, April 2017).
 - “Coherence phenomena in high-energy nuclear collisions: from initial to final state” (invited), given at *Hot QCD Matters* (Frascati, Italy, May 2017).
 - “Theory overview on CNM effects” (invited plenary), given at the *17th International Conference on Strangeness in Quark Matter (SQM 2017)* (Utrecht, The Netherlands, July 2017).
 - “Heavy-ion physics at the LHC and ep/eA” (invited), given at the *Workshop on the LHeC and the FCC-eh* (CERN, Switzerland, September 2017).
 - “Electron-Ion Physics: Status Report”, given at the *Workshop on the LHeC and the FCC-eh* (CERN, Switzerland, September 2017).
 - “The Large Hadron-electron Collider at CERN” (invited plenary), given at the *4th international conference on the initial stages in high-energy nuclear collisions* (Krakow, Poland, September 2017).
 - “nPDFs/small-x/UPC: Theory”, given at the *Workshop on the physics of HL-LHC, and perspectives at HE-LHC* (CERN, Switzerland, October-November 2017).
 - “Physics case for ep and eA colliders (theory)” (invited plenary), given at the *Workshop on Future Hadron Colliders at the Energy Frontier* (DESY, Hamburg, Germany, December 2017).
 - “Nuclear PDFs”, given at the *2nd FCC Physics Workshop* (CERN, Switzerland, January 2018).
 - “Lessons from EIC: how to determine the gluon density” (invited), given at the *Workshop: Low-x gluon structure of nuclei and signals of saturation at LHC* (CERN, Switzerland, March 2018).
 - “Heavy Ion Theory addressed in the above facilities” (invited plenary), given at the *Discussion for European Strategy Update for Particle Physics (ESUPP)* at the *XXVI International Workshop on Deep Inelastic Scattering and Related Subjects* (Kobe, Japan, April 2018).
 - “Future of nuclear PDFs” (invited), dada en el *XXVI International Workshop on Deep Inelastic Scattering and Related Subjects* (Kobe, Japan, April 2018).

- “Small- x Physics”, given at the *First joint Workshop IGFAE / LIP* (Braga, Portugal, May 2018).
- “Initial stages with lighter ions” (invited), given at the *Workshop on the physics of HL-LHC, and perspectives at HE-LHC* (CERN, Switzerland, June 2018).
- “Summary: Small x and Physics with eA” (invited), given at the *Electrons for the LHC - LHeC/FCC-eh and Perle Workshop* (LAL Orsay, France, June 2018).
- “Initial stages in heavy-ion collisions - from small to large systems” (invited), given at the workshop *Holography and Extreme Chromodynamics HoloQuark2018* (Santiago de Compostela, July 2018).
- “Multi gluon correlations in the Color Glass Condensate: quantum interference in proton-nucleus collisions”, given at the *9th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions HP2018* (Aix-Les-Bains, France, October 2018).
- “Resolving the Partonic Structure of Nuclei through Energy-Frontier eA Scattering”, given at the *9th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions HP2018* (Aix-Les-Bains, France, October 2018).
- “eA collisions at the LHeC and nuclear parton densities”, given at the *XXVII International Workshop on Deep Inelastic Scattering and Related Subjects* (Torino, Italy, April 2019).
- “Summary of WG2” (invited plenary), given at the *XXVII International Workshop on Deep Inelastic Scattering and Related Subjects* (Torino, Italy, April 2019).
- “Strong interaction physics at future eA colliders” (invited), given at the *CERN Council Open Symposium on the Update of the European Strategy for Particle Physics* (Granada, Spain, May 2019).
- “Perspectives for high-density QCD with ions beyond HL-LHC: ep/eA and pA/AA” (invited), given at the workshop *Forward Physics and Diffraction at the LHC* (Dublin, Ireland, June 2019).
- “CERN perspective” (invited plenary), given at the *5th International Conference on the Initial Stages in High-Energy Nuclear Collisions IS2019* (New York, USA, June 2019).
- “FCC-eh Physics and Machine Design” (invited), given at the *FCC Workshop* (Antalya, Turkey, September 2019).
- “eA collisions at the LHeC and the FCC-eh”, given at the *9th International Conference on Physics Opportunities at an ElecTron-Ion-Collider POETIC9* (Berkeley, USA, September 2019).
- “Physics of eA and nPDFs”, given at the *ELECTRONS FOR THE LHC: Workshop on the LHeC, FCC-eh and PERLE* (Chavannes-des-Bogis, Switzerland, October 2019).
- “eA physics”, given at the *3rd FCC Physics and Experiments Workshop* (CERN, Switzerland, January 2020).

- “Nuclear PDFs and what we can learn from an electron-ion collider” (invited), given at the *8th Edition of the Large Hadron Collider Physics Conference* (virtual conference, May 2020).
- “Nuclear PDFs: status and prospects” (invited), given at the *Conference on Flavour Physics and CP violation (FPCP) 2020* (virtual conference, June 2020).
- “Future Electro-Proton and Electron-Hadron Colliders - Open Questions and New Ideas” (invited), given at the *Energy Frontier Workshop - Open Questions and New Ideas* (virtual conference, July 2020).
- “DIS on nuclei at the LHeC and FCC-eh”, given at the *LXX International conference "NUCLEUS – 2020. Nuclear physics and elementary particle physics. Nuclear physics technologies"* (virtual conference, October 2020).
- “Correlations between azimuthal asymmetries and multiplicity and mean transverse momentum in small collisions systems in the CGC”, given at the *XXVIII International Workshop on Deep-Inelastic Scattering and Related Subjects DIS2021* (virtual conference, April 2021).
- “Role of MPI to HI” (invited), given at the *12th International workshop on Multiple Partonic Interactions at the LHC* (virtual conference and in Lisbon, Portugal, October 2021).
- “Correlations from the initial stage” (invited), given at the workshop *Physics of Saturation - precision and quasicollectivity* (Beer Sheva, Israel, May 2022).
- “Jet quenching and the first fermi/c” (invited), given at the workshop *Jet Quenching In The Quark-Gluon Plasma* (ECT*, Trento, Italy, June 2022).
- “eA and high parton densities at the LHeC and FCC-he”, given at the *XLI International Conference on High Energy Physics ICHEP2022* (Bologna, Italy, July 2022).
- “Progress on nuclear PDF and CGC” (invited), given at the *8th International Workshop on Heavy Flavour Production in Nuclear Collisions HF-WINC 2020* (Torino, Italy, July 2022).
- “Nuclei”, given at *The LHeC/FCCeh and PERLE Workshop at Orsay* (Orsay, France, October 2022).
- “Physics with LHeC and FCC-eh”, given at the *XXIX The Cracow Epiphany Conference* (Cracow, Poland, January 2023).
- “Single inclusive particle production in pA collisions at forward rapidities: beyond the hybrid model”, given at the *DIS2023: XXX International Workshop on Deep-Inelastic Scattering and Related Subjects* (East Lansing, USA, March 2023).
- “Status and challenges of the LHeC and the FCC-he”, given at the *DIS2023: XXX International Workshop on Deep-Inelastic Scattering and Related Subjects* (East Lansing, USA, March 2023).
- “Single inclusive particle production in pA collisions at forward rapidities: beyond the hybrid model”, given at the workshop *Color Glass Condensate at the Electron-Ion Collider* (Trento,

Italy, May 2023).

- “The color glass condensate and forward physics at the LHC and EIC” (invited), given at the *Forward Physics and QCD at the LHC and the EIC - 798 WE-Heraeus Seminar* (Bad Honnef, Germany, October 2023).
- “LHC prospects and complementarity with EIC physics” (invited), given at the *Joint ECFA-NuPECC-APPEC Activity Workshop ”Synergies between the EIC and the LHC”* (DESY, Germany, December 2023).
- Poster entitled “Diffraction, string fusion and QGP”, presented at the European Research Conference on *Physics on High Energy Heavy-Ion Collisions* (Vuosaari, Finland, June 1994).
- Poster entitled “eA collisions at the LHeC and the FCC”, presented at the *XXV International Conference on Ultrarelativistic Heavy-ion Collisions Quark Matter 2015* (Kobe, Japan, September 2015).
- Poster entitled “A common eh/hh interaction region and detector for the LHC”, presented at the *XLI International Conference on High Energy Physics ICHEP2022* (Bologna, Italy, July 2022).

Schools and conferences attended:

- Attendance to the school “A Física dos noventa” (Universidad Internacional Menéndez Pelayo, Spain, July 1991).
- Attendance to the *XXII International Symposium on Multiparticle Dynamics* (Santiago de Compostela, Spain, July 1992).
- Attendance to the school “Renormalización: teoría y práctica” (Santiago de Compostela, Spain, September 1993).
- Attendance to the NASI School on *Hot and Dense Nuclear Matter* (Bodrum, Turkey, September–October 1993).
- Attendance to the European Research Conference on *Physics on High Energy Heavy-Ion Collisions* (Vuosaari, Finland, June 1994).
- Attendance to the school “QCD y lagrangianos efectivos” (Santiago de Compostela, Spain, September 1994).
- Attendance to the *IX International Workshop on High Energy Physics and Quantum Field Theory* (Zvenigorod, Russia, September 1994).
- Attendance to the *XXXth Rencontres de Moriond* (Les Arcs, France, March 1995).
- Attendance to the *International Europhysics Conference on High Energy Physics* (Brussels, Belgium, July–August 1995).
- Attendance to the *XXV Reunión Bienal de la Sociedad Española de Física* (Santiago de Compostela, Spain, September 1995).

- Attendance to the *IXth International Symposium on Very High Energy Cosmic Ray Interactions* (Karlsruhe, Germany, August 1996).
- Attendance to the *Rencontres de Théoriciens* (Clermont–Ferrand, France, January 1997).
- Attendance to the *XXXIInd Rencontres de Moriond* (Les Arcs, France, March 1997).
- Attendance to the *Madrid Workshop on low x Physics* (Miraflores de la Sierra, Spain, June 1997).
- Attendance to the *XVIIIth International Symposium on Lepton–Photon Interactions* (Hamburg, Germany, July–August 1997).
- Attendance to the *Vth International Workshop on Hard Probes in Nuclear Collisions* (Lisbon, Portugal, September 1997).
- Attendance to the *DESY Theory Workshop 1997: Recent Developments in QCD* (Hamburg, Germany, September 1997).
- Attendance to the *Workshop on Interplay between Soft and Hard Interactions in Deep–Inelastic Scattering* (Heidelberg, Germany, September–October 1997).
- Attendance to the *XIth Rencontres de Blois: Frontiers of Matter* (Blois, France, June–July 1999).
- Attendance to the *Meeting on Percolation in High Energy Physics and Astrophysics* (Lisbon, Portugal, July 1999).
- Attendance to the *XVII Autumn School: QCD: Perturbative or Nonperturbative* (Lisbon, Portugal, September–October 1999).
- Attendance to the *Workshop on Percolation and Related Topics* (Santiago de Compostela, Spain, February 2000).
- Attendance to the *OSCAR III Workshop* (Nantes, France, June 2000).
- Attendance to the *5th CMS Heavy Ion Meeting* (Gatchina, Russia, June 2000).
- Attendance to the *IVth International Conference on Hyperons, Charm and Beauty Hadrons* (Valencia, Spain, June 2000).
- Attendance to the *Workshop at CERN on Heavy Ion Physics at the LHC* (CERN, Geneva, November 2000).
- Attendance to the *Workshop on Percolation Phenomena: Basic Techniques and Applications* (Bielefeld, Germany, May 2001).
- Attendance to the *International Europhysics Conference on High Energy Physics* (Budapest, Hungary, July 2001).
- Attendance to the *Colloque International sur la Physique du Plasma de Quarks et de Gluons* (Palaiseau, France, September 2001).
- Attendance to the *Informal Meeting on Percolation and Heavy Ion Collisions* (Lisbon, Por-

tugal, November 2001).

- Attendance to the Second Meeting of the *2002 CERN Workshop on Hard Probes in Heavy Ion Collisions at the LHC* (CERN, Geneva, Switzerland, March 2002).
- Attendance to the Third Meeting of the *2002 CERN Workshop on Hard Probes in Heavy Ion Collisions at the LHC* (CERN, Geneva, Switzerland, October 2002).
- Attendance to the *Colloque en l'honneur de Alfons Capella, André Krzywicki et Jean Tran Thanh Van: Interactions fondamentales et Physique Hadronique* (Orsay, France, October 2002).
- Attendance to the *Workshop on Heavy Ions and Cosmic Rays* (Santiago de Compostela, Spain, February 2003).
- Attendance to the *XXXVIIIth Rencontres de Moriond: QCD and Hadronic Interactions* (Les Arcs, France, March 2003).
- Attendance to the Workshop *The First Three Years of Heavy-Ion Physics at RHIC* (INT, Seattle, United States, April 2003).
- Attendance to the *NA60 Collaboration Meeting* (Lisbon, Portugal, June 2003).
- Attendance to the *ECT* Workshop on Color Glass Condensate and Parton Percolation* (Trento, Italy, June 2003).
- Attendance to the *CERN Workshop on Monte Carlo Tools for the LHC* (CERN, Geneva, Switzerland, July 2003).
- Attendance to the *XXXIII International Symposium on Multiparticle Dynamics* (Krakow, Poland, September 2003).
- Attendance to the *Heavy Ion Meeting* (Faro, Portugal, October 2003).
- Attendance to the *Second Electron-Ion Collider Workshop* (Jefferson Lab, Newport News, Virginia, USA, March 2004).
- Attendance to the *XXXIXth Rencontres de Moriond: QCD and Hadronic Interactions* (La Thuile, Italy, March-April 2004).
- Attendance to the *Eighth Workshop on Non-Perturbative Quantum Chromodynamics* (Paris, France, June 2004).
- Attendance to the *CMS Heavy Ion Physics Workshop* (CERN, Geneva, Switzerland, June 2004).
- Attendance to *Focus on MULTIPLICITY: International Workshop on Particle Multiplicity in Relativistic Heavy Ion Collisions* (Bari, Italy, June 2004).
- Attendance to *Physics at LHC* (Vienna, Austria, July 2004).
- Attendance to the *BRAHMS Workshop on Forward Physics* (Lawrence, Kansas, USA, October 2004).
- Attendance to *Hard Probes 2004: International Conference on Hard and Electromagnetic*

- Probes of High Energy Nuclear Collisions* (Ericeira, Portugal, November 2004).
- Attendance to the *7th Meeting on Percolation and Related Subjects* (Lisbon, Portugal, April 2005).
 - Attendance to the *Workshop on Proton-Nucleus Collisions at the LHC* (CERN, Geneva, Switzerland, May 2005), as organizer of the session “p+A as a benchmark for A+A”.
 - Attendance to the *HEP2005 International Europhysics Conference on High Energy Physics* (Lisbon, Portugal, July 2005).
 - Attendance to the *Quark Matter 2005: 18th International Conference on Ultra-Relativistic Nucleus-Nucleus Collisions* (Budapest, Hungary, August 2005).
 - Attendance to the *ALICE-EELA Meeting* (Madrid, Spain, May 2006).
 - Attendance to the *Fifth International Conference on Perspectives in Hadronic Physics: Particle-Nucleus and Nucleus-Nucleus Scattering at Relativistic Energies* (ICTP Trieste, Italy, May 2006).
 - Attendance to the *IVth International Conference on Quarks and Nuclear Physics* (Madrid, Spain, June 2006).
 - Attendance to the *2nd International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions* (Monterey, USA, June 2006).
 - Attendance to the *Low x Meeting* (Lisbon, Portugal, June-July 2006).
 - Attendance to the *Informal Meeting on Astroparticle Physics* (Santiago de Compostela, July 2006).
 - Attendance to the *XXXIII International Conference on High Energy Physics ICHEP’06* (Moscow, Russia, July-August 2006).
 - Attendance to the *ECT International Workshop on Heavy Flavor Physics in Heavy Ion Collisions at the LHC* (Trento, Italy, September 2006).
 - Attendance to the *19th International Conference on Ultra-Relativistic Nucleus-Nucleus Collisions (QM2006)* (Shanghai, China, November 2006).
 - Attendance to the *Workshop on AdS/CFT and strongly coupled quark matter* (Beijing, China, November 2006).
 - Attendance to the *ECT International Workshop on High energy QCD : from RHIC to LHC* (Trento, Italy, January 2007).
 - Attendance to the *ALICE Physics Week 2007* (Münster, Germany, February 2007).
 - Attendance to the *Conference on Early Time Dynamics in Heavy Ion Collisions* (McGill University, Montreal, Canada, July 2007).
 - Attendance to the *9th Meeting on Percolation and Saturation in Heavy Ion Collisions and Cosmic Rays* (Faro, Portugal, September 2007).

- Attendance to the *20th International Conference on Ultra-Relativistic Nucleus-Nucleus Collisions (QM2008)* (Jaipur, India, February 2008).
- Attendance to the workshop *Hot and Dense Matter in the RHIC-LHC era* (Mumbai, India, February 2008).
- Attendance to the workshop *Structure of Hadrons and Nuclei at an Electron Ion Collider (ECT*, Trento, Italy, July 2008)*.
- Attendance to the *1st ECFA-CERN LHeC Workshop* (Divonne-les-Bains, France, September 2008), as organizer of the working group on *Physics at High Parton Densities (ep and eA)*.
- Attendance to the *XIII Mexican School of Particles and Fields* (San Carlos, México, October 2008).
- Attendance to the *Meeting IN2P3 - MICINN* (Madrid, Spain, January 2009).
- Attendance to the *LHeC pre-meeting* (Madrid, April 2009).
- Attendance to the *XVII International Workshop on Deep-Inelastic Scattering and Related Subjects DIS 2009* (Madrid, April 2009).
- Attendance to the *LHeC Pre-meeting: Small x and high parton densities* (CERN, Switzerland, June 2009).
- Attendance to the *Primera Reunión de la Red Temática de Física del LHC* (Granada, Spain, October 2009).
- Attendance to the *Workshop on nuclear Parton Distribution Functions* (Annecy, France, February 2010).
- Attendance to the *LHeC conveners and steering group meeting* (CERN, Geneva, Switzerland, May 2010).
- Attendance to the *NuPECC LR2010 Town Meeting* (Madrid, Spain, May-June 2010).
- Attendance to the *Workshop on QCD at High Density and High Energy* (Lisbon, Portugal, June 2010).
- Attendance to the workshop *Light Cone 2010* (Valencia, Spain, June 2010).
- Attendance to the CERN Theory Institute *The first heavy ion collisions at the LHC - HIC10* (CERN, Switzerland, August-September 2010).
- Attendance to the *LEVINFEST An International Symposium in celebration of Genya Levin's 70th birthday* (Tel Aviv, Israel, October 2010).
- Attendance to the *4th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions (HP2010)* (Eilat, Israel, October 2010).
- Attendance to the *First ReteQuarkonii Workshop (RQW 2010)* (Nantes, France, October 2010).
- Attendance to the *3rd CERN-ECFA-NuPECC Workshop on the LHeC* (Chavannes-de-Bogis,

Switzerland, November 2010).

- Attendance to the *10a Trobada de Nadal de Física Teorica a la Universitat de Barcelona* (Barcelona, Spain, December 2010).
- Attendance to the *XXXIX International Meeting on Fundamental Physics* (Canfranc Underground Laboratory, Spain, February 2011).
- Attendance to the *XXII International Conference on Ultrarelativistic Nucleus-Nucleus Collisions - Quark Matter 2011* (Annecy, France, May 2011).
- Attendance to the *19th Particles and Nuclei International Conference (PANIC11)* (Boston, US, July 2011).
- Attendance to *LC11: understanding QCD at Linear Colliders in searching for old and new physics* (Trento, Italy, September 2011).
- Attendance to the *Informal Meeting on Strings and Heavy Ions* (Madrid, Spain, October 2011).
- Attendance to the *LPCC Workshop on Prospects of p-Pb collisions during the 2012 LHC HI run* (CERN, Switzerland, October 2011).
- Attendance to the *Workshop on Selected Topics in Theoretical Physics* (Santiago de Compostela, Spain, October 2011).
- Attendance to the *III CPAN Days* (Barcelona, Spain, November 2011).
- Attendance to the *XXth International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2012)* (Bonn, Germany, March 2012).
- Attendance to the *XL International Meeting on Fundamental Physics* (Benasque, Spain, May-June 2012).
- Attendance to the *2012 CERN-ECFA-NuPECC Workshop on the LHeC* (Chavannes-des-Bogis, Switzerland, June 2012).
- Attendance to the conference *Heavy Ion Collisions in the LHC Era* (Quy Nhon, Vietnam, July 2012).
- Attendance to the *23rd International Conference on Ultra-Relativistic Nucleus-Nucleus Collisions (Quark Matter 2012)* (Washington D.C., USA, August 2012).
- Attendance to the *Open Symposium - European Strategy Preparatory Group* (Krakow, Poland, September 2012).
- Attendance to the workshop *Jet quenching: the interface between theory and experiment* (CERN, Switzerland, February 2013).
- Attendance to the *LHeC Miniworkshop at LPCC* (CERN, Switzerland, April 2013).
- Attendance to the *XXIst International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2013)* (Marseille, France, April 2013).

- Attendance to the *Low x Physics Workshop* (Rehovot-Eilat, Israel, May-June 2013).
- Attendance to the *25th International Nuclear Physics Conference INPC2013* (Florence, Italy, June 2013).
- Attendance to the workshop *h3QCD* (Trento, Italy, June 2013).
- Attendance to the *9th International Workshop on High- p_T Physics at LHC* (Grenoble, France, September 2013).
- Attendance to the *LHeC Detector Meeting* (CERN, Switzerland, November 2013).
- Attendance to the *V CPAN Days* (Santiago de Compostela, Spain, November 2013).
- Attendance to the workshop *Ions at the Future Hadron Collider* (CERN, Switzerland, December 2013).
- Attendance to the *2014 LHeC Workshop* (Chavannes-de-Bogis, Switzerland, January 2014).
- Attendance to the workshop *Ions at the Future Hadron Collider* (CERN, Switzerland, January 2014).
- Attendance to *Quark Matter 2014 - XXIV International Conference on Ultrarelativistic Nucleus-Nucleus Collisions* (Darmstadt, Germany, May 2014).
- Attendance to the *Mont Sainte Odile Think Tank* (Mont Sainte Odile, France, May 2014).
- Attendance to the *3rd Heavy Ion Jet Workshop* (Lisbon, Portugal, July 2014).
- Attendance to the *Workshop on Implications of LHCb measurements and future prospects* (CERN, Switzerland, October 2014).
- Attendance to the *2nd International Conference on the Initial Stages in High-Energy Nuclear Collisions* (Napa, California, USA, December 2014).
- Attendance to the workshop *Heavy Ion Collisions at the LHC: the First One Fermi* (Beer Sheva, Israel, May-June 2015).
- Attendance to the *2015 LHeC Workshop* (CERN and Chavannes-de-Bogis, Switzerland, June 2015).
- Attendance to the *16th conference on Elastic and Diffractive Scattering EDS Blois 2015* (Borgo, France, June-July 2015).
- Attendance to the workshop *QCD@LHC 2015* (London, UK, September 2015).
- Attendance to *POETIC6: 6th International Conference on Physics Opportunities at an ElecTron-Ion Collider* (Palaiseau, France, September 2015).
- Attendance to the *XXV International Conference on Ultrarelativistic Heavy-ion Collisions Quark Matter 2015* (Kobe, Japan, September 2015).
- Attendance to the *Electron Ion Collider User Group Meeting 2016* (Berkeley, USA, January 2016).
- Attendance to the *FCC Week 2016* (Rome, Italy, April 2016).

- Attendance to the *IS2016 International Conference on the Initial Stages in High-Energy Nuclear Collisions* (Lisbon, Portugal, May 2016).
- Attendance to the *8th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions HP2016* (Wuhan, China, September 2016).
- Attendance to the *Joint CTEQ Meeting and 7th International Conference on Physics Opportunities at an EIC (POETIC 7)* (Philadelphia, USA, November 2016).
- Attendance to the *1st FCC Physics Workshop* (CERN, Switzerland, January 2017).
- Attendance to the *25th International Workshop on Deep Inelastic Scattering and Related Topics DIS 2017* (Birmingham, UK, April 2017).
- Attendance to *Hot QCD Matters* (Frascati, Italy, May 2017).
- Attendance to the *17th International Conference on Strangeness in Quark Matter (SQM 2017)* (Utrecht, The Netherlands, July 2017).
- Attendance to *XXXVI Reunión Bienal de la Real Sociedad Española de Física* (Santiago de Compostela, Spain, July 2017).
- Attendance to the *Workshop on the LHeC and the FCC-eh* (CERN, Switzerland, September 2017).
- Attendance to the *4th international conference on the initial stages in high-energy nuclear collisions* (Krakow, Poland, September 2017).
- Attendance to the *Workshop on the physics of HL-LHC, and perspectives at HE-LHC* (CERN, Switzerland, October-November 2017).
- Attendance to the *Workshop on Future Hadron Colliders at the Energy Frontier* (DESY, Hamburg, Germany, December 2017).
- Attendance to the *2nd FCC Physics Workshop* (CERN, Switzerland, January 2018).
- Attendance to the *XXVI International Workshop on Deep Inelastic Scattering and Related Subjects* (Kobe, Japan, April 2018).
- Attendance to the *First joint Workshop IGFAE / LIP* (Braga, Portugal, May 2018).
- Attendance to the *Workshop on the physics of HL-LHC, and perspectives at HE-LHC* (CERN, Switzerland, June 2018).
- Attendance to the *Electrons for the LHC - LHeC/FCC-eh and Perle Workshop*, (LAL Orsay, France, June 2018).
- Attendance to the workshop *Holography and Extreme Chromodynamics HoloQuark2018* (Santiago de Compostela, July 2018).
- Attendance to the *9th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions HP2018* (Aix-Les-Bains, France, October 2018).
- Attendance to the *XXVII International Workshop on Deep Inelastic Scattering and Related*

Subjects (Torino, Italy, April 2019).

- Attendance to the *CERN Council Open Symposium on the Update of the European Strategy for Particle Physics* (Granada, Spain, May 2019).
- Attendance to the *5th International Conference on the Initial Stages in High-Energy Nuclear Collisions IS2019* (New York, USA, June 2019).
- Attendance to the *FCC Workshop* (Antalya, Turkey, September 2019).
- Attendance to the *9th International Conference on Physics Opportunities at an Electron-Ion-Collider POETIC9* (Berkeley, USA, September 2019).
- Attendance to the *ELECTRONS FOR THE LHC: Workshop on the LHeC, FCC-eh and PERLE* (Chavannes-des-Bogis, Switzerland, October 2019).
- Attendance to the *3rd FCC Physics and Experiments Workshop* (CERN, Switzerland, January 2020).
- Attendance to the *8th Edition of the Large Hadron Collider Physics Conference* (virtual conference, May 2020).
- Attendance to the *Conference on Flavour Physics and CP violation (FPCP) 2020* (virtual conference, June 2020).
- Attendance to the *LXX International conference "NUCLEUS – 2020. Nuclear physics and elementary particle physics. Nuclear physics technologies"* (virtual conference, October 2020).
- Attendance to the *XXVIII International Workshop on Deep-Inelastic Scattering and Related Subjects DIS2021* (virtual conference, April 2021).
- Attendance to the *12th International workshop on Multiple Partonic Interactions at the LHC* (virtual conference and in Lisbon, Portugal, October 2021).
- Attendance to the workshop *Physics of Saturation - precision and quasicollectivity* (Beer Sheva, Israel, May 2022).
- Attendance to the workshop *Jet Quenching In The Quark-Gluon Plasma* (ECT*, Trento, Italy, June 2022).
- Attendance to the *XLI International Conference on High Energy Physics ICHEP2022* (Bologna, Italy, July 2022).
- Attendance to *The LHeC/FCCeh and PERLE Workshop at Orsay* (Orsay, France, October 2022).
- Attendance to the *XXIX The Cracow Epiphany Conference* (Cracow, Poland, January 2023).
- Attendance to the *DIS2023: XXX International Workshop on Deep-Inelastic Scattering and Related Subjects* (East Lansing, USA, March 2023).
- Attendance to the workshop *Color Glass Condensate at the Electron-Ion Collider* (Trento, Italy, May 2023).

- Attendance to the workshop *Forward Physics and QCD at the LHC and the EIC - 798 WE-Heraeus Seminar* (Bad Honnef, Germany, October 2023).
- Attendance to the *13th ICFA Seminar on Future Perspectives in High Energy Physics* (DESY, Germany, November-December 2023).
- Attendance to the *Joint ECFA-NuPECC-APPEC Activity Workshop "Synergies between the EIC and the LHC"* (DESY, Germany, December 2023).
- Attendance to the *Synergy workshop between ep/eA and pp/pA/AA physics experiments* (CERN, Switzerland, February-March 2024).

Participation in research projects:

- “Fenomenología de Altas Energías: extensiones de QCD, Plasma de Quarks y Gluones y Astrofísica de Partículas”, supported by CICYT of Spain (AEN 93–0729), from May 1993 to April 1996.
- “Interplay of soft and hard interactions in hadronic and nuclear interactions”, supported by the EC (INTAS 9379), from January 1994 to December 1996.
- “Intersección entre Teoría y Fenomenología Perturbativa y No Perturbativa con Aceleradores y Astrofísica de Partículas”, supported by CICYT of Spain (AEN99–0589–C02–01), from January 2000 to December 2002, as main researcher within Universidad de Córdoba.
- “Intersección de aspectos No Perturbativos y Perturbativos en Física de Solitones y materia de alta densidad y Fenomenología de Astropartículas”, supported by CICYT of Spain (FPA2002–01161), from January 2003 to December 2005, as invited researcher.
- “Métodos Perturbativos y No Perturbativos en Teoría y Fenomenología de Partículas, Núcleos y Rayos Cósmicos a Altas Energías”, supported by CICYT of Spain (FPA2005–01963) from January 2006 to December 2008, as main researcher from September 2006.
- FQM330, “Física de Altas Energías”, supported by Junta de Andalucía, main researcher: Fernando Cornet, from October 2002 to December 2004.
- “Axuda para a consolidación de unidades de investigación competitivas”, supported by Xunta de Galicia, Consellería de Educación e Ordenación Universitaria, main researcher: José Luis Miramontes Antas, from January 2006 to December 2008.
- “Materia hadrónica densa en colisións entre ións pesados a moi alta enerxía”, supported by Xunta de Galicia (PGIDIT07PXIB206126PR), as main researcher, from January 2007 to December 2009.
- “Centro Nacional de Física de Partículas, Astropartículas y Nuclear”, supported by Ministerio de Educación y Ciencia of Spain (CSD2007-00042), main researcher: Antonio Pich Zardoya, from January 2007 to December 2011.
- “Heavy flavoured jets in heavy-ion collisions at the LHC”, coordinated action with the INFN

supported by Ministerio de Educación y Ciencia of Spain (INFN08-05), as main researcher, from May 2008 to December 2009.

– “Fenomenología en LHC, rayos y sus aplicaciones cosmológicas”, supported by Ministerio de Ciencia e Innovación of Spain (FPA2008-01177), main researcher: Carlos Pajares Vales, from January 2009 to December 2012.

– “Electromagnetic Calorimeter for Jets - JETCAL”, supported by the EU (Seventh Framework Program, Joint Research Activity within the net Hadron Physics I3), main researcher: Valeria Muccifora (at the USC: Elena G. Ferreiro), from January 2009 to December 2011.

– “Testing phases and non-perturbative features of QCD with quarkonia - ReteQuarkonii”, supported by the EU (Seventh Framework Program, Network Activity within the net Hadron Physics I3), main researcher: Ginés Martínez (at the USC: Elena G. Ferreiro), from January 2009 to December 2011.

– “Heavy flavoured jets in heavy-ion collisions at the LHC”, coordinated action with the INFN supported by Ministerio de Ciencia e Innovación of Spain (ACI2009-1078), as main researcher, from January 2010 to March 2011.

– “Estudios numéricos y analíticos de QCD a altas densidades para el LHC”, supported by Ministerio de Ciencia e Innovación (FPA2009-11951), main researcher: Carlos Alberto Salgado López, from January 2010 to December 2012.

– “Cromodinámica cuántica a altas energías no LHC e en aceleradores futuros”, supported by Xunta de Galicia (PGIDIT10PXIB206017PR), as main researcher, from August 2010 to September 2013.

– “Fenomenología en el LHC y sus implicaciones en astropartículas”, supported by Ministerio de Ciencia e Innovación of Spain (FPA2011-22776), main researcher: Carlos Pajares Vales, from January 2012 to December 2014.

– ERC-2011-StG-279579 “Hot and dense QCD in the LHC era (HotLHC)”, Starting Grant of the European Research Council, main researcher: Carlos Alberto Salgado López, from January 2012 to December 2016.

– 2012-PI001 “Study of Strongly Interacting Matter”, (Seventh Framework Program, Joint Research Activity within the net Hadron Physics I3), main researcher: Valeria Muccifora (at the USC: Elena G. Ferreiro), from January 2012 to December 2014.

– PIRSES-GA-2012-318921 QCDHI “High-Energy QCD for Heavy Ions”, (Seventh Framework Program, Marie Curie International Research Staff Exchange Scheme (IRSES)), main researcher: Michael Lublinsky (at the USC: Néstor Armesto), from January 2013 to December 2016.

– “Interacciones fundamentales en condiciones extremas”, supported by Ministerio de Ciencia

e Innovación of Spain (FPA2014-58293), main researcher: Néstor Armesto Pérez and Carlos Alberto Salgado López, from January 2015 to December 2018.

– ED431C 2017/07 "Grupo de referencia competitiva", supported by Xunta de Galicia, main researcher: José Luis Miramontes Antas, from January 2017 to December 2020.

– MDM-2016-0692 "Unidad de Excelencia María de Maetzu", supported by Ministerio de Economía, Industria y Competitividad of Spain, main researcher: Carlos Alberto Salgado López, from July 2017 to June 2021.

– FPA2017-83814-P "QCD a alta temperatura y densidad desde escalas pequeñas a grandes", supported by Ministerio de Economía, Industria y Competitividad of Spain, main researchers: Elena González Ferreiro and Carlos Alberto Salgado López, from January 2018 to December 2020.

– MSCA RISE 823947 HIEIC "Heavy ion collisions: collectivity and precision in saturation physics" (program Horizon 2020, Marie Skłodowska-Curie Research and Innovation Staff Exchange), main researcher: Tolga Altinoluk (at the USC: Néstor Armesto), from June 2019 to May 2023.

– INFRAIA-01-2018-2019 804293 STRONG2020 "The strong interaction at the frontier of knowledge: fundamental research and applications" (program H2020, Integrating and opening research infrastructures of European interest), WP13: NA2-Small-x Physics at the LHC and future DIS experiments (Small-x), main researchers: Néstor Armesto and Tuomas Lappi, from June 2019 to May 2023.

– ERC-2018-ADG-835105 "Yoctosecond imaging of QCD collectivity using jet observables (YoctoLHC)", Advanced Grant of the European Research Council, main researcher: Carlos Alberto Salgado López, from October 2019 to September 2024.

– RED2018-102573-E "Participación Española en Estructuras Europeas de Investigación en Física de Partículas, Astropartículas y Nuclear", Red de Investigación supported by Ministerio de Ciencia, Innovación e Universidades, main researcher: Antonio Pich Zardoya, from January 2020 to December 2021.

– ED431G 2019/05 "Axuda para a acreditación, estruturación e mellora de centros de investigación do Sistema universitario de Galicia", supported by Consellería de Educación, Universidade e Formación of Xunta de Galicia, main researcher: Carlos Alberto Salgado López, from December 2019 to December 2022.

Meetings organized:

– Meeting entitled *Workshop on Percolation in Hadronic Physics*, held in Córdoba, Spain, in November 3rd-4th 2000, supported by the Secretaría de Estado de Política Científica y Tecnológica of Spain under contract FPA2000-2066-E.

- Meeting entitled *Workshop on Hadronic Physics at High Energies*, held in Santiago de Compostela, Spain, in February 10th-11th 2006, supported by the Secretaría de Estado de Política Científica y Tecnológica of Spain under contract FPA2005–25360–E, and by USC (organized together with Carlos Pajares).
- Main organizer, with N. Borghini, S. Jeon and U. A. Wiedemann, of the program within CERN Theory Institute entitled *Heavy Ion Collisions at the LHC - Last Call for Predictions*, held at CERN from May 14th to June 8th 2007, and supported by CERN.
- Main organizer, with C. A. Salgado, C. Pajares. E. G. Ferreiro, F. Antinori, J. Casalderrey-Solana, D. d’Enterría, C. Lourenço, G. Martínez y J. G. Milhano, of the *3rd International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions - HP2008*, celebrada en el Hotel Louxo, Illa de A Toxa, from June 8th to 14th 2008, and supported by Secretaría de Estado de Política Científica y Tecnológica de España bajo la Acción Complementaria FPA2007–30616–E, by “Centro Nacional de Física de Partículas, Astropartículas y Nuclear” supported by Ministerio de Educación y Ciencia (CSD2007-00042), by IN2P3, by CERN, by Journal of Physics G, and by Xunta de Galicia (Consellería de Educación).
- Meeting entitled *Workshop on High-Density QCD at the LHC and in Cosmic Rays*, held in Santiago de Compostela, Spain, in February 2nd-4th 2009, supported by Ministerio de Educación y Ciencia (CSD2007-00042) (organized together with J. Álvarez, J. Dias de Deus, Elena G. Ferreiro, Carlos Pajares y Carlos A. Salgado).
- Meeting entitled *Low x Meeting*, held in Santiago de Compostela, Spain, in June 3rd-7th 2011, supported by Ministerio de Educación y Ciencia (CSD2007-00042), (organized together with C. M. Merino, G. Parente and C. Royon).
- Meeting entitled *Hot and dense QCD in the LHC era. Startup meeting of the ERC-StG - XII Encontro Lisboa-Compostela*, held in Santiago de Compostela, Spain, in February 8th-10th 2012, supported by Ministerio de Educación y Ciencia (CSD2007-00042) and by the “Hot and dense QCD in the LHC era (HotLHC)” Starting Grant of the European Research Council (organized together with J. Álvarez, J. Dias de Deus, Elena G. Ferreiro, J. G. Milhano, Carlos Pajares y Carlos A. Salgado).
- Organizer, together with C. A. Salgado, C. Pajares. E. G. Ferreiro, F. Antinori, J. Casalderrey-Solana, D. d’Enterría, J. Dias de Deus, J. López Albacete and J. G. Milhano, of the *IS2013 International Conference on the Initial Stages in High-Energy Nuclear Collisions* held at Hotel Louxo, Illa de A Toxa, from September 8th to 14th 2013, supported by “Centro Nacional de Física de Partículas, Astropartículas y Nuclear”, by CERN, by Journal of Physics G, and by the “Hot and dense QCD in the LHC era (HotLHC)” Starting Grant del European Research Council.

- Organizer (Co-Chair), together with Carlos Pajares (Chair), Carlota Andrés, Jose Benlliure, Elena G. Ferreira, Alexis Moscoso, Gonzalo Parente y Carlos A. Salgado, of the *III RUSSIAN-SPANISH CONGRESS: Particle, Nuclear, Astroparticle Physics and Cosmology* (Santiago de Compostela, September 8th-11th 2015), supported by the “Hot and dense QCD in the LHC era (HotLHC)” Starting Grant of the European Research Council.
- Organizer, together with Tolga Altinoluk, Liliana Apolinário, Jorge Dias de Deus, Aleks Kurkela, Guilherme Milhano, Gunther Roland, Helena Santos, João Seixas, Konrad Tywoniuk, Urs Wiedemann and Korinna Zapp, of the *IS2016 International Conference on the Initial Stages in High-Energy Nuclear Collisions* held at IST, Lisbon, from May 23rd to 27th 2016, and supported by IST and CERN.
- Organizer, together with Dolores Cortina Gil (chair), Elena López Lago (co-chair), Josefa Fernández Pérez, Abraham Gallas Torreira, Luis Javier Gallego del Hoyo, Faustino Gómez Rodríguez, Jose Luis Legido Soto, Jorge Mira Pérez, Víctor Pardo Castro, Vicente Pérez Muñuzuri, Carolina Torrón Casal, Luis Miguel Varela Cabo and Enrique Zas Arregui, of the *XXXVI Reunión Bienal de la Real Sociedad Española de Física* held in Santiago de Compostela, Spain, from July 17th to 21st 2017.
- Organisation, together with Oliver Brüning, Walid Kaabi, Uta Klein and Zhiqing Zhang, of the *Electrons for the LHC - LHeC/FCC-eh and Perle Workshop*, held at LAL Orsay, France, June 27th to 29th 2018.
- Organisation, together with Alex Kovner, Michael Lublinsky and Cyrille Marquet, of the program Collectivity and correlations in high-energy hadron and nuclear collisions and of the COST workshop on collectivity in small systems, held at Centro de Ciencias de Benasque Pedro Pascual, Benasque, Spain, August 5th to 18th 2018, supported by COST and by CNRS.
- Organiser, together with Jaime Álvarez, Liliana Apolinário, Rubén Conceição and Ricardo Rodríguez, of the *2nd edition of the Joint Workshop LIP/IGFAE*, in Santiago de Compostela, on April 26th 2019.
- Organisation, together with Gianluigi Arduini, Alex Bogacz, Daniel Britzger, Oliver Bruening, Walid Kaabi, Max Klein, and Elodie Dumeaux-Kurzen, of *ELECTRONS FOR THE LHC: Workshop on the LHeC, FCC-eh and PERLE*, held at Chavannes-des-Bogis, Switzerland, October 24th-25th 2019.
- Organisation, together with Zvi Citron, Michael Lublinsky, Alexander Milov, Itzhak Tserruya, Julia Velkovska and Urs Wiedemann, of the *IS2021 International Conference on the Initial Stages in High-Energy Nuclear Collisions* held virtually from January 10th to 15th 2021.
- Main organiser, together with Tolga Altinoluk, Patricia Conde, Leticia Cunqueiro, Pasquale Di Nezza, Elena Ferreira, Abraham Gallas, Pier Paolo Giardino, Claire Gwenlan, José Guil-

herme Milhano, Hannu Paukkunen, Carlos Salgado, Christian Schwanenberger and Bin Wu, of the *DIS2022: XXIX International Workshop on Deep-Inelastic Scattering and Related Subjects*, held in Santiago de Compostela from May 2nd to 6th 2022 and supported by BNL, CERN, DESY, JLab and Xunta de Galicia.

– Organisation, together to Alex Bogacz, Daniel Britzger, Oliver Brüning, Jorgen D’Hondt, Walid Kaaki, Max Klein and Achille Stocchi, of the *The LHeC/FCCeh and PERLE Workshop at Orsay*, held in Orsay, Francia, from October 26th to 28th 2022 and supported by CERN.

PhD. supervision:

– Graduation memory entitled “Heavy flavour production in hadronic and nuclear collisions”, by C. A. Salgado at the Universidade de Santiago de Compostela in June 1996, co-supervised together with C. Pajares.

– PhD. entitled “Percolation of strings and Quark Gluon Plasma”, by Félix del Moral Vila at the Universidade de Santiago de Compostela in November 2002, co-supervised together with E. G. Ferreiro and C. Pajares.

– PhD. entitled “Study of dense partonic systems in Quantum Chromodynamics”, by Javier López Albacete at the Universidad de Granada in July 2005.

– PhD. entitled “Interplay between initial and final state effects in high density matter”, by Leticia Cunqueiro Méndez at the Universidade de Santiago de Compostela in July 2008, co-supervised together with C. Pajares and C. A. Salgado.

– PhD. entitled “QCD in heavy ions: from initial to final states”, by Paloma Quiroga Arias at the Universidade de Santiago de Compostela in September 2010, co-supervised together with C. Pajares.

– PhD. entitled “Energy loss of fast partons in a colored medium”, by Liliana Marisa Cunha Apolinário at the Universidade de Santiago de Compostela in December 2013, co-supervised together with J. G. Milhano.

– PhD. entitled “Multi-particle production in the Color Glass Condensate”, by Pedro Augusto Agostini Infante at the Universidade de Santiago de Compostela in November 2021, co-supervised together with Tolga Altinoluk.