

## **Brief Curriculum Vitae: Barenboim, Gabriela**

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**Research Interests:** Theoretical physics: Neutrino physics. Phenomenology of elementary particles and their interactions and implications on astrophysical and cosmological scenarios. Collider physics. Physics beyond the Standard Model.

### **Education:**

Univ. Buenos Aires (Argentina)	BSc in Physics	March 1993
Univ. Valencia (Spain)	PhD in Physics	20 <sup>th</sup> , June 1997

### **Career**

University of Buenos Aires research fellowship ( undergraduate )	1991-1993
National Atomic Energy Commission fellow (graduate )	1992-1994
University of Valencia, MUTIS fellowship ( graduate )	1994-1997
Mainz University (Germany) postdoctoral fellow	1997-1999
CERN, TH division, paid associate	1999-2001
Fermilab, theory group, research associate	2001-2003
University of Valencia, Ramon y Cajal fellow	2003-2007
University of Valencia, Professor.	2007-
CERN-TH Neutrino Platform coordinator	2015-
EuCAPT- Directorate	2023-

### **Honors**

- Idea Prize awarded by the Arts and Science Foundation (Spain) on the category of Basic Research, 2006
- Behram Kursunuglu award, given at the Coral Gables Conference for best postdoctoral presentation, December 2002.
- Outstanding PhD Thesis Award, University of Valencia, 1997

### **Invited talks, Seminars and Lectures (over the last 10 years)**

~ 25 invited talks at international conferences .

~ 60 invited seminars at different international research centers

- Lecturer (3 x 1 hours) GGI Neutrino Frontiers, June 2024.
- Lecturer (3 x 1 hours), XXI LNF Spring School “Bruno Touschek” May 2024.
- Lecturer (2 x 1,5 hours) CERN European School on High Energy Physics, Greena, Denmark, September 2023.
- Lecturer (3 x 1 hours) Niels Bohr Academy on neutrinos, Copenhagen, July 2023.
- Lecturer (3 x 1 hour) at the TAE21, Bidasoa Science Centre, Spain, September 2021.
- Lecturer (2 x 1,5 hours) CERN International Neutrino Summer School, Switzerland August, 2021.
- Lecturer (3 x 1,5 hours) CERN Asia-Europe-Pacific School on High Energy Physics, September 2018, Vietnam.
- Lecturer (3 x 1,5 hours) CERN European School of High-Energy Physics, June 2016, Norway.
- Lecturer (3 x 1 hour) at the TAE15, Bidasoa Science Centre, September 2015, Spain.
- Lecturer (3 x 1 hour) at the International Meeting on Fundamental Physics, June 2013, Spain.

Publications of Gabriela Barenboim as of Agust 17, 2024

(DUNE publications not included)

1. G. Barenboim, H. Sanchis, W. H. Kinney and D. Rios, [arXiv:2407.18102 [astro-ph.CO]].
2. G. Barenboim, P. Ko and W. i. Park, [arXiv:2403.08675 [hep-ph]].
3. G. Barenboim, P. Ko and W. i. Park, [arXiv:2403.05390 [hep-ph]].
4. G. Barenboim., L. D. Debbio, J. Hirn, J., and V. Sanz  
Neural Comput& Applic **36**, 17007–17022 (2024). <https://doi.org/10.1007/s00521-024-09956-9>
5. G. Barenboim, A. M. Calatayud-Cadenillas, A. M. Gago and C. A. Ternes, Phys. Lett. B **852** (2024), 138626 doi:10.1016/j.physletb.2024.138626 [arXiv:2402.16395 [hep-ph]].
6. G. Barenboim and A. M. Gago, [arXiv:2402.03438 [hep-ph]].
7. R. Alicki, G. Barenboim and A. Jenkins, [arXiv:2307.04803 [gr-qc]].
8. R. Alicki, G. Barenboim and A. Jenkins, Phys. Rev. D **108** (2023) no.12, 123530 doi:10.1103/PhysRevD.108.123530 [arXiv:2307.04800 [gr-qc]].
9. G. Barenboim, P. Martínez-Miravé, C. A. Ternes and M. Tórtola, Phys. Rev. D **108** (2023) no.3, 035039 doi:10.1103/PhysRevD.108.035039 [arXiv:2305.06384 [hep-ph]].
10. G. Barenboim, Front. in Phys. **10** (2022), 813753 doi:10.3389/fphy.2022.813753
11. C. A. Argüelles, G. Barenboim, M. Bustamante, P. Coloma, P. B. Denton, I. Esteban, Y. Farzan, E. F. Martínez, D. V. Forero and A. M. Gago, *et al.* Eur. Phys. J. C **83** (2023) no.1, 15 doi:10.1140/epjc/s10052-022-11049-7 [arXiv:2203.10811 [hep-ph]].
12. G. Barenboim, N. Blinov and A. Stebbins, JCAP **12** (2021) no.12, 026 doi:10.1088/1475-7516/2021/12/026 [arXiv:2107.10293 [astro-ph.CO]].
13. G. Barenboim, J. Hirn and V. Sanz, SciPost Phys. **11** (2021), 014 doi:10.21468/SciPostPhys.11.1.014 [arXiv:2103.06115 [cs.LG]].
14. G. Barenboim, J. Z. Chen, S. Hannestad, I. M. Oldengott, T. Tram and Y. Y. Y. Wong, JCAP **03** (2021), 087 doi:10.1088/1475-7516/2021/03/087 [arXiv:2011.01502 [astro-ph.CO]].
15. G. Barenboim and U. Nierste, Phys. Rev. D **104** (2021) no.2, 023013 doi:10.1103/PhysRevD.104.023013 [arXiv:2005.13280 [hep-ph]].
16. M. A. Tórtola, G. Barenboim and C. A. Ternes, JHEP **07** (2020), 155 doi:10.1007/JHEP07(2020)155 [arXiv:2005.05975 [hep-ph]].
17. G. A. Barenboim, P. Martínez-Miravé, C. A. Ternes and M. A. Tórtola, JHEP **03** (2020), 070 doi:10.1007/JHEP03(2020)070 [arXiv:1911.02329 [hep-ph]].
18. G. Barenboim, J. Turner and Y. L. Zhou, Eur. Phys. J. C **81** (2021) no.6, 511 doi:10.1140/epjc/s10052-021-09300-8 [arXiv:1909.04675 [hep-ph]].
19. G. Barenboim and C. T. Hill, Eur. Phys. J. C **81** (2021) no.2, 150 doi:10.1140/epjc/s10052-021-08928-w [arXiv:1909.01956 [hep-th]].

20. G. Barenboim, P. B. Denton and I. M. Oldengott, *Phys. Rev. D* **99** (2019) no.8, 083515 doi:10.1103/PhysRevD.99.083515 [arXiv:1903.02036 [astro-ph.CO]].
21. G. Barenboim, P. B. Denton, S. J. Parke and C. A. Ternes, *Phys. Lett. B* **791** (2019), 351-360 doi:10.1016/j.physletb.2019.03.002 [arXiv:1902.00517 [hep-ph]].
22. G. Barenboim and W. I. Park, *Eur. Phys. J. C* **79** (2019) no.6, 456 doi:10.1140/epjc/s10052-019-6970-6 [arXiv:1901.05799 [hep-ph]].
23. I. M. Oldengott, G. Barenboim, S. Kahlen, J. Salvado and D. J. Schwarz, *JCAP* **04** (2019), 049 doi:10.1088/1475-7516/2019/04/049 [arXiv:1901.04352 [astro-ph.CO]].
24. G. Barenboim, M. Masud, C. A. Ternes and M. Tórtola, *Phys. Lett. B* **788** (2019), 308-315 doi:10.1016/j.physletb.2018.11.040 [arXiv:1805.11094 [hep-ph]].
25. G. Barenboim, C. A. Ternes and M. Tórtola, *Eur. Phys. J. C* **79** (2019) no.5, 390 doi:10.1140/epjc/s10052-019-6900-7 [arXiv:1804.05842 [hep-ph]].
26. G. Barenboim, C. A. Ternes and M. Tórtola, *Phys. Lett. B* **780** (2018), 631-637 doi:10.1016/j.physletb.2018.03.060 [arXiv:1712.01714 [hep-ph]].
27. G. Barenboim, W. H. Kinney and M. J. P. Morse, *Phys. Rev. D* **98** (2018) no.8, 083531 doi:10.1103/PhysRevD.98.083531 [arXiv:1710.04458 [astro-ph.CO]].
28. G. Barenboim and W. I. Park, *JCAP* **12** (2017), 037 doi:10.1088/1475-7516/2017/12/037 [arXiv:1708.04899 [astro-ph.CO]].
29. G. Barenboim and J. Salvado, *Eur. Phys. J. C* **77** (2017) no.11, 766 doi:10.1140/epjc/s10052-017-5347-y [arXiv:1707.08155 [hep-ph]].
30. G. Barenboim and W. I. Park, *JCAP* **04** (2017), 048 doi:10.1088/1475-7516/2017/04/048 [arXiv:1703.08258 [hep-ph]].
31. G. Barenboim and C. Bosch, *Phys. Rev. D* **94** (2016) no.11, 116019 doi:10.1103/PhysRevD.94.116019 [arXiv:1610.06588 [hep-ph]].
32. G. Barenboim and W. I. Park, *Phys. Lett. B* **765** (2017), 371-376 doi:10.1016/j.physletb.2016.12.043 [arXiv:1610.02335 [astro-ph.CO]].
33. G. Barenboim, W. H. Kinney and W. I. Park, *Eur. Phys. J. C* **77** (2017) no.9, 590 doi:10.1140/epjc/s10052-017-5147-4 [arXiv:1609.03200 [astro-ph.CO]].
34. G. Barenboim, W. H. Kinney and W. I. Park, *Phys. Rev. D* **95** (2017) no.4, 043506 doi:10.1103/PhysRevD.95.043506 [arXiv:1609.01584 [hep-ph]].
35. G. Barenboim and O. Vives, *Nucl. Part. Phys. Proc.* **273-275** (2016), 446-451 doi:10.1016/j.nuclphysbps.2015.09.065
36. G. Barenboim and W. I. Park, *Phys. Lett. B* **759** (2016), 430-438 doi:10.1016/j.physletb.2016.06.009 [arXiv:1605.03781 [astro-ph.CO]].
37. G. Barenboim, W. I. Park and W. H. Kinney, *JCAP* **05** (2016), 030 doi:10.1088/1475-7516/2016/05/030 [arXiv:1601.08140 [astro-ph.CO]].

38. G. Barenboim and W. I. Park, Phys. Rev. D **93** (2016) no.12, 123508  
doi:10.1103/PhysRevD.93.123508 [arXiv:1512.07915 [astro-ph.CO]].
39. G. Barenboim and W. I. Park, Phys. Lett. B **756** (2016), 317-322  
doi:10.1016/j.physletb.2016.03.038 [arXiv:1508.00011 [hep-ph]].
40. G. Barenboim, C. Bosch, J. S. Lee, M. L. López-Ibáñez and O. Vives, Phys. Rev. D **92** (2015)  
no.9, 095017 doi:10.1103/PhysRevD.92.095017 [arXiv:1507.08304 [hep-ph]].
41. G. Barenboim and W. I. Park, JCAP **02** (2016), 061 doi:10.1088/1475-7516/2016/02/061  
[arXiv:1504.02080 [astro-ph.CO]].
42. G. Barenboim, J. Bernabeu, V. A. Mitsou, E. Romero and O. Vives, Eur. Phys. J. C **76**  
(2016), 57 doi:10.1140/epjc/s10052-016-3901-7 [arXiv:1503.04184 [hep-ph]].
43. G. Barenboim and W. I. Park, Phys. Rev. D **91** (2015) no.6, 063511  
doi:10.1103/PhysRevD.91.063511 [arXiv:1501.00484 [hep-ph]].
44. G. Barenboim and W. I. Park, Phys. Lett. B **741** (2015), 252-255  
doi:10.1016/j.physletb.2014.12.042 [arXiv:1412.2724 [hep-ph]].
45. G. Barenboim, E. J. Chun, S. Jung and W. I. Park, Phys. Rev. D **90** (2014) no.3, 035020  
doi:10.1103/PhysRevD.90.035020 [arXiv:1407.1218 [hep-ph]].
46. G. Barenboim and O. Vives, Phys. Lett. B **748** (2015), 336-342 doi:10.1016/j.physletb.2015.07.018  
[arXiv:1405.6498 [hep-ph]].
47. G. Barenboim, C. Bosch, M. L. López-Ibáñez and O. Vives,  
Phys. Rev. D **90** (2014) no.1, 015003 doi:10.1103/PhysRevD.90.015003 [arXiv:1311.7321 [hep-  
ph]].
48. G. Barenboim and J. Rasero, JHEP **04** (2014), 138  
doi:10.1007/JHEP04(2014)138 [arXiv:1311.4034 [hep-ph]].
49. G. Barenboim, E. J. Chun and H. M. Lee, Phys. Lett. B **730** (2014), 81-88  
doi:10.1016/j.physletb.2014.01.039 [arXiv:1309.1695 [hep-ph]].
50. G. Barenboim, C. Bosch, M. L. López-Ibáñez and O. Vives, JHEP **11** (2013), 051  
doi:10.1007/JHEP11(2013)051 [arXiv:1307.5973 [hep-ph]].
51. J. Norena, L. Verde, G. Barenboim and C. Bosch, JCAP **08** (2012), 019 doi:10.1088/1475-  
7516/2012/08/019 [arXiv:1204.6324 [astro-ph.CO]].
52. G. Barenboim and J. Rasero, JHEP **07** (2012), 028  
doi:10.1007/JHEP07(2012)028 [arXiv:1202.6070 [hep-ph]].
53. G. Barenboim and G. Panotopoulos, JHEP **08** (2011), 027  
doi:10.1007/JHEP08(2011)027 [arXiv:1102.0189 [hep-ph]].
54. G. Barenboim, Phys. Rev. D **82** (2010), 093014  
doi:10.1103/PhysRevD.82.093014 [arXiv:1009.2504 [hep-ph]].
55. G. Barenboim and J. Rasero, JHEP **03** (2011), 097  
doi:10.1007/JHEP03(2011)097 [arXiv:1009.3024 [hep-ph]].

56. G. Barenboim and G. Panotopoulos, *JHEP* **09** (2010), 011  
doi:10.1007/JHEP09(2010)011 [arXiv:1004.4525 [hep-ph]].
57. G. Barenboim, E. F. Martínez, O. Mena and L. Verde, *JCAP* **03** (2010), 008 doi:10.1088/1475-7516/2010/03/008 [arXiv:0910.0252 [astro-ph.CO]].
58. G. Barenboim and J. D. Lykken, *Phys. Rev. D* **80** (2009), 113008  
doi:10.1103/PhysRevD.80.113008 [arXiv:0908.2993 [hep-ph]].
59. G. Barenboim, *JHEP* **03** (2009), 102 doi:10.1088/1126-6708/2009/03/102 [arXiv:0811.2998 [hep-ph]].
60. G. Barenboim and O. Vives, *Phys. Rev. D* **79** (2009), 033007 doi:10.1103/PhysRevD.79.033007 [arXiv:0806.4389 [hep-ph]].
61. G. Barenboim, P. Paradisi, O. Vives, E. Lunghi and W. Porod, *JHEP* **04** (2008), 079  
doi:10.1088/1126-6708/2008/04/079 [arXiv:0712.3559 [hep-ph]].
62. G. Barenboim and J. Lykken, *JCAP* **03** (2008), 017  
doi:10.1088/1475-7516/2008/03/017 [arXiv:0711.3653 [astro-ph]].
63. G. Barenboim and J. D. Lykken, *JHEP* **10** (2007), 032  
doi:10.1088/1126-6708/2007/10/032 [arXiv:0707.3999 [astro-ph]].
64. G. Barenboim and W. H. Kinney, *JCAP* **03** (2007), 014 doi:10.1088/1475-7516/2007/03/014 [arXiv:astro-ph/0701343 [astro-ph]].
65. G. Barenboim and J. D. Lykken, *JHEP* **12** (2006), 005 doi:10.1088/1126-6708/2006/12/005 [arXiv:hep-ph/0608265 [hep-ph]].
66. G. Barenboim, O. Mena Requejo and C. Quigg, *Phys. Rev. D* **74** (2006), 023006  
doi:10.1103/PhysRevD.74.023006 [arXiv:astro-ph/0604215 [astro-ph]].
67. G. Barenboim and J. D. Lykken, *JHEP* **07** (2006), 016 doi:10.1088/1126-6708/2006/07/016 [arXiv:astro-ph/0604528 [astro-ph]].
68. G. Barenboim, N. E. Mavromatos, S. Sarkar and A. Waldron-Lauda, *Nucl. Phys. B* **758** (2006), 90-111 doi:10.1016/j.nuclphysb.2006.09.012 [arXiv:hep-ph/0603028 [hep-ph]].
69. G. Barenboim, O. Mena Requejo and C. Quigg, *JCAP* **04** (2006), 008  
doi:10.1088/1475-7516/2006/04/008 [arXiv:astro-ph/0510178 [astro-ph]].
70. R. N. Mohapatra, S. Antusch, K. S. Babu, G. Barenboim, M. C. Chen, S. Davidson, A. de Gouvêa, P. de Holanda, B. Dutta and Y. Grossman, *et al. Rept. Prog. Phys.* **70** (2007), 1757-1867 doi:10.1088/0034-4885/70/11/R02 [arXiv:hep-ph/0510213 [hep-ph]].
71. G. Barenboim and J. D. Lykken, *Phys. Lett. B* **633** (2006), 453-457  
doi:10.1016/j.physletb.2005.12.041 [arXiv:astro-ph/0504090 [astro-ph]].
72. G. Barenboim, O. Mena and C. Quigg, *Phys. Rev. D* **71** (2005), 063533  
doi:10.1103/PhysRevD.71.063533 [arXiv:astro-ph/0412010 [astro-ph]].
73. G. Barenboim, O. Mena Requejo and C. Quigg, *Phys. Rev. D* **71** (2005), 083002  
doi:10.1103/PhysRevD.71.083002 [arXiv:hep-ph/0412122 [hep-ph]].

74. G. Barenboim and N. E. Mavromatos, *Phys. Rev. D* **70** (2004), 093015  
doi:10.1103/PhysRevD.70.093015 [arXiv:hep-ph/0406035 [hep-ph]].
75. G. Barenboim and N. E. Mavromatos, *JHEP* **01** (2005), 034 doi:10.1088/1126-6708/2005/01/034  
[arXiv:hep-ph/0404014 [hep-ph]].
76. G. Barenboim and J. D. Lykken, *Phys. Lett. B* **583** (2004), 304-308  
doi:10.1016/j.physletb.2003.12.076 [arXiv:hep-ph/0303238 [hep-ph]].
77. G. Barenboim and C. Quigg, *Phys. Rev. D* **67** (2003), 073024 doi:10.1103/PhysRevD.67.073024  
[arXiv:hep-ph/0301220 [hep-ph]].
78. G. Barenboim and J. D. Lykken, *Phys. Lett. B* **554** (2003), 73-80 doi:10.1016/S0370-2693(02)03262-8  
[arXiv:hep-ph/0210411 [hep-ph]].
79. G. Barenboim, J. F. Beacom, L. Borisso and B. Kayser, *Phys. Lett. B* **537** (2002), 227-232  
doi:10.1016/S0370-2693(02)01947-0 [arXiv:hep-ph/0203261 [hep-ph]].
80. G. Barenboim, L. Borisso and J. D. Lykken, *Phys. Lett. B* **534** (2002), 106-113  
doi:10.1016/S0370-2693(02)01597-6 [arXiv:hep-ph/0201080 [hep-ph]].
81. G. Barenboim, L. Borisso, J. D. Lykken and A. Y. Smirnov, *JHEP* **10** (2002), 001 doi:10.1088/1126-6708/2002/10/001  
[arXiv:hep-ph/0108199 [hep-ph]].
82. G. Barenboim, M. Gorbahn, U. Nierste and M. Raidal, *Phys. Rev. D* **65** (2002), 095003  
doi:10.1103/PhysRevD.65.095003 [arXiv:hep-ph/0107121 [hep-ph]].
83. G. Barenboim, F. J. Botella and O. Vives, *Nucl. Phys. B* **613** (2001), 285-305 doi:10.1016/S0550-3213(01)00390-X  
[arXiv:hep-ph/0105306 [hep-ph]].
84. G. Barenboim, A. Dighe and S. Skadhauge, *Phys. Rev. D* **65** (2002), 053001  
doi:10.1103/PhysRevD.65.053001 [arXiv:hep-ph/0106002 [hep-ph]].
85. G. Barenboim, G. C. Branco, A. de Gouvea and M. N. Rebelo, *Phys. Rev. D* **64** (2001), 073005  
doi:10.1103/PhysRevD.64.073005 [arXiv:hep-ph/0104312 [hep-ph]].
86. M. C. Banuls, G. Barenboim and J. Bernabeu, *Phys. Lett. B* **513** (2001), 391-400 doi:10.1016/S0370-2693(01)00723-7  
[arXiv:hep-ph/0102184 [hep-ph]].
87. G. Barenboim, F. J. Botella and O. Vives, *Phys. Rev. D* **64** (2001), 015007  
doi:10.1103/PhysRevD.64.015007 [arXiv:hep-ph/0012197 [hep-ph]].
88. G. Barenboim, K. Huitu and M. Raidal, *Phys. Rev. D* **63** (2001), 055006  
doi:10.1103/PhysRevD.63.055006 [arXiv:hep-ph/0005159 [hep-ph]].
89. G. Barenboim and F. Scheck, *Phys. Lett. B* **485** (2000), 171-177  
doi:10.1016/S0370-2693(00)00708-5 [arXiv:hep-ph/0004160 [hep-ph]].
90. G. Barenboim, *Phys. Lett. B* **482** (2000), 123-128 doi:10.1016/S0370-2693(00)00526-8
91. G. Barenboim and F. Scheck, *Phys. Lett. B* **475** (2000), 95-103  
doi:10.1016/S0370-2693(00)00068-X [arXiv:hep-ph/0001208 [hep-ph]].
92. G. Barenboim, G. Eyal and Y. Nir, *Phys. Rev. Lett.* **83** (1999), 4486-4489  
doi:10.1103/PhysRevLett.83.4486 [arXiv:hep-ph/9905397 [hep-ph]].

93. G. Barenboim and F. Scheck, Phys. Lett. B **461** (1999), 235-242  
doi:10.1016/S0370-2693(99)00752-2 [arXiv:hep-ph/9904331 [hep-ph]].
94. G. Barenboim and M. Raidal, Phys. Lett. B **457** (1999), 109-117  
doi:10.1016/S0370-2693(99)00510-9 [arXiv:hep-ph/9903270 [hep-ph]].
95. G. Barenboim and F. Scheck, Phys. Lett. B **450** (1999), 189-195  
doi:10.1016/S0370-2693(99)00109-4 [arXiv:hep-ph/9812351 [hep-ph]].
96. G. Barenboim, J. Bernabeu, J. Matias and M. Raidal, Phys. Rev. D **60** (1999), 016003  
doi:10.1103/PhysRevD.60.016003 [arXiv:hep-ph/9901265 [hep-ph]].
97. G. Barenboim, Phys. Lett. B **443** (1998), 317-324  
doi:10.1016/S0370-2693(98)01283-0 [arXiv:hep-ph/9810325 [hep-ph]].
98. G. Barenboim and F. Scheck, Phys. Lett. B **440** (1998), 332 doi:10.1016/S0370-2693(98)01115-0 [arXiv:hep-ph/9808327 [hep-ph]].
99. G. Barenboim and N. Rius, Phys. Rev. D **58** (1998), 065010 doi:10.1103/PhysRevD.58.065010 [arXiv:hep-ph/9803215 [hep-ph]].
100. G. Barenboim, Eur. Phys. J. C **1** (1998), 369-374
101. G. Barenboim, Nucl. Phys. B **534** (1998), 318-328 doi:10.1016/S0550-3213(98)00538-0
102. G. Barenboim, J. Bernabeu and M. Raidal, Phys. Rev. Lett. **80** (1998), 4625-4628  
doi:10.1103/PhysRevLett.80.4625 [arXiv:hep-ph/9712349 [hep-ph]].
103. G. Barenboim, F. J. Botella, G. C. Branco and O. Vives, Phys. Lett. B **422** (1998), 277-286  
doi:10.1016/S0370-2693(97)01515-3 [arXiv:hep-ph/9709369 [hep-ph]].
104. G. Barenboim and F. J. Botella, Phys. Lett. B **433** (1998), 385-395 doi:10.1016/S0370-2693(98)00695-9 [arXiv:hep-ph/9708209 [hep-ph]].
105. G. Barenboim and M. Raidal, Phys. Lett. B **406** (1997), 219-224 doi:10.1016/S0370-2693(97)00703-X [arXiv:hep-ph/9704211 [hep-ph]].
106. G. Barenboim, J. Bernabeu and M. Raidal, Nucl. Phys. B **511** (1998), 577-593 doi:10.1016/S0550-3213(97)00668-8 [arXiv:hep-ph/9702337 [hep-ph]].
107. G. Barenboim, J. Bernabeu, J. Prades and M. Raidal, Phys. Rev. D **55** (1997), 4213-4221  
doi:10.1103/PhysRevD.55.4213 [arXiv:hep-ph/9611347 [hep-ph]].
108. G. Barenboim, K. Huitu, J. Maalampi and M. Raidal, Phys. Lett. B **394** (1997), 132-138  
doi:10.1016/S0370-2693(96)01670-X [arXiv:hep-ph/9611362 [hep-ph]].
109. G. Barenboim and M. Raidal, Nucl. Phys. B **484** (1997), 63-79 doi:10.1016/S0550-3213(96)00645-1 [arXiv:hep-ph/9607281 [hep-ph]].
110. G. Barenboim, J. Bernabeu and M. Raidal, Nucl. Phys. B **478** (1996), 527-543 doi:10.1016/0550-3213(96)00441-5 [arXiv:hep-ph/9608450 [hep-ph]].
111. G. Barenboim, J. Bernabeu and O. Vives, Phys. Rev. Lett. **77** (1996), 3299  
doi:10.1103/PhysRevLett.77.3299 [arXiv:hep-ph/9606218 [hep-ph]].

112. G. Barenboim and J. Bernabeu, *Z. Phys. C* **73** (1997), 321-331 doi:10.1007/s002880050321 [arXiv:hep-ph/9603379 [hep-ph]].
113. G. Barenboim, *Mod. Phys. Lett. A* **11** (1996), 2105-2114 doi:10.1142/S0217732396002095
114. G. Barenboim, *Mod. Phys. Lett. A* **11** (1996), 2837-2848 doi:10.1142/S0217732396002824
115. D. Tommasini, G. Barenboim, J. Bernabeu and C. Jarlskog, *Nucl. Phys. B* **444** (1995), 451-467 doi:10.1016/0550-3213(95)00201-3 [arXiv:hep-ph/9503228 [hep-ph]].
116. E. D. Izquierdo, G. Barenboim and A. O. Gattone, *Nucl. Phys. A* **609** (1996), 437-453 doi:10.1016/S0375-9474(96)00276-X [arXiv:nucl-th/9504009 [nucl-th]].
117. G. Barenboim, A. O. Gattone and E. D. Izquierdo, *Phys. Rev. C* **48** (1993), 2537-2540 doi:10.1103/PhysRevC.48.2537