

Curriculum Vitae

Prof. Augusto Sagnotti

See also:

http://en.wikipedia.org/wiki/Augusto_Sagnotti

<https://scuola.academia.edu/AugustoSagnotti>

Present Position: Professor of Theoretical Physics at Scuola Normale (since 2005)

- *Laurea in Ingegneria Elettronica* (U. Roma, 29-07-1978), 110/110 cum laude
Thesis: Propagazione di luce parzialmente coerente in fibre ottiche. Applicazione alla misura del profilo d'indice.
Advisors: Prof. B. Crosignani e Prof. Paolo Di Porto. *Carosio Prize, 1979.*
- *Master of Science in Electrical Engineering* (Caltech, USA, 06-1979)
- *Doctor of Philosophy in Theoretical Physics* (Caltech, USA, 06-1983)
Thesis: Topics in supersymmetry theory

Advisor: Prof. J.H. Schwarz

Academic career:

- Research Fellow (Caltech) 1983-84
- Miller Research Fellow (U.C.Berkeley) 1984-86
- Junior Faculty (U. Roma "Tor Vergata") 1985-93
- Associate Professor (U. Roma "Tor Vergata") 1994-99 • Professor (U. Roma "Tor Vergata") 2000-05
- Professor (Scuola Normale Superiore) 2005-

Awards and Honors:

- Carosio Prize (U. Roma "La Sapienza", 1979)
- Miller Fellowship (U. of California, Berkeley, 1984)
- SIGRAV Prize 1994 (with M. Bianchi)
- Andrejewski Lecturer (Humboldt Universitat, Berlin, 1999)
- Margherita HACK Prize for Science (INAF and Italian Ministry of Culture, Venice, 2014)
- Alexander von Humboldt Research Award, 2018

Research activity:

Field Theory, Quantum Gravity, String theory, 2D Conformal Field Theory, Supersymmetry Breaking, Higher-Spin Gauge Fields, Early Universe and String Theory

INSPIRE profile: about 11200 citations, h=53, 3 TOP 500, 9 TOP 250, 22 TOP 100, 20 TOP 50 (November, 2021)

BOOKS

- “String Theory”, eds. C. Procesi and A. Sagnotti (Academic Press, 1988)
- “String Theory, Quantum Gravity and the Unification of the Fundamental Interactions”, eds. M. Bianchi, F. Fucito, V. Marinari and A. Sagnotti (World Scientific, 1992)
- “Statistical Physics. Fundamentals and Advanced Topics”, by C. Heissenberg and AS (Cambridge U. Press, in press)

Teaching:

- Quantum Mechanics
- Statistical Mechanics
- Classical Field Theory
- Quantum Field Theory
- Mathematical Methods
- String Theory
- Classical Mechanics

Encyclopedia articles:

- “Teoria delle Stringhe”, Enciclopedia della Scienza, vol. IX (Ist. Enc. Treccani, 2003)
- “Supersimmetria”, Enciclopedia della Scienza e della Tecnica (Ist. Enc. Treccani, 2006, with F. Fucito)

Some visits to other Institutions:

U. Warsaw (1988,2014), DESY (1989,2019), IHES (1990,1996), UCLA (1992,2015), Caltech (1992,2001,2015), E. Polytechnique (1992,1994,1995,1999,2005,2008,2014,2016,2018), CERN (1996,2004), CERN Scientific Associate (2005,2014), Inst. for Adv. Study, MIT, Harvard (1996), Humboldt U. (1999), E. Normale Superieure (2000), LPT-Orsay (2001), U. Cambridge, U. Oxford (2001), U. Uppsala (2004), LMU Munich (2008), U. Wien (2012), U. Paris VII (2007,2008,2009,2016), Tokyo Metropolitan U. (2013)

Research Management:

- National Theoretical Physics Committee, Gr. IV INFN (1988-1996)
- Coordinator of the Italian nodes in three successive EU contracts
- Coordinator of two successive INTAS contracts
- Coordinator of the “Tor Vergata” node in two successive PRIN contracts
- Coordinator of the “Tor Vergata” node for the contract INFN-TS11
- National Coordinator of the PRIN project 2008-024045
- Coordinator of the Italian nodes of the ERC-SUPERFIELD Project (Senior Grant awarded to Prof. Sergio Ferrara)
- National Coordinator of the PRIN project 2009-KHZKRX
- National Coordinator of the PRIN project 2017-CC72MK

Referee for:

- Phys. Rev. and Phys. Rev. Lett.

- Phys. Lett. B and Nucl. Phys. B
- Phys. Reports
- Class. Q. Gravity
- JHEP
- Member of International Committees in: Belgium, France, Germany, UK, Israel, Netherlands, Russia, Spain, Sweden, USA

Main contributions:

- *The analysis of the 2-loop divergences in Einstein's theory of General Relativity:*

- M.H. Goroff and AS, "Quantum Gravity At Two Loops", Phys. Lett. B160 (1985) 81 [341 cites]
- M.H. Goroff and AS, "The Ultraviolet Behavior Of Einstein Gravity", Nucl. Phys. B266 (1986) 709 [678 cites]

- *Constraints on Chan-Paton groups (only U, O, USp) and Open strings:*

- N. Marcus and AS, "Tree Level Constraints on Gauge Groups for Type I Superstrings," Phys. Lett. B119 (1982) 97 [147 cites]
- N. Marcus and AS, "Group Theory from Quarks at the Ends of Strings," Phys. Lett. B188 (1987), 58 [135 cites]

- *The discovery of the link between type-I and type-IIB superstrings (now regarded as the prototype "orientifold" construction):*

- AS, "Open Strings And Their Symmetry Groups", in Cargese '87, "Non-perturbative Quantum Field Theory", eds. G. 't Hooft et al., p. 521, reprinted in arXiv:hep-th/0208020 [458 cites].

- *The elucidation of the key properties of "orientifolds" (strings with different boundary conditions, spectra including different numbers of (anti)self-dual two-tensors, discrete deformations, generalized Green-Schwarz mechanism):*

- G. Pradisi and AS, "Open String Orbifolds", Phys. Lett. B216 (1989) 59 [429 cites]
- M. Bianchi and AS, "On The Systematics Of Open String Theories", Phys. Lett. B247 (1990) 517 [548 cites]
- M. Bianchi and AS, "Twist Symmetry And Open String Wilson Lines", Nucl. Phys. B361 (1991) 519 [428 cites]
- M. Bianchi, G. Pradisi and AS, "Toroidal compactification and symmetry breaking in open string theories", Nucl. Phys. B376 (1992) 365 [380 cites]
- AS, "A Note on the Green-Schwarz mechanism in open string theories", Phys. Lett. B294 (1992) 196 [arXiv:hep-th/9210127] [509 cites]

- *The elucidation of the key properties of Conformal Field Theory on non-orientable surfaces:*

- D. Fioravanti, G. Pradisi and AS, "Sewing constraints and nonorientable open strings", Phys. Lett. B321 (1994) 349 [arXiv:hep-th/9311183] [99 cites]
- G. Pradisi, AS and Y.S. Stanev, "Planar duality in SU(2) WZW models" , Phys. Lett. B354 (1995) 279 [arXiv:hep-th/9503207] [159 cites]

- G. Pradisi, AS and Y.S. Stanev, “The Open descendants of nondiagonal SU(2) WZW Models”, Phys. Lett. B356 (1995) 230 [arXiv:hep-th/9506014] [157 cites]

- G. Pradisi, AS and Y.S. Stanev, “Completeness Conditions for Boundary Operators in 2D Conformal Field Theory”, Phys. Lett. B381 (1996) 97 [arXiv:hep-th/9603097] [217 cites].

- The first example of a chiral four-dimensional open-string spectrum with three generations of matter:

- C. Angelantonj, M. Bianchi, G. Pradisi, AS and Y.S. Stanev, “Chiral asymmetry in four-dimensional open-string vacua”, Phys. Lett. B385 (1996) 96 [arXiv:hep-th/9606169] [266 cites].

- The discovery of a 10D superstring theory (commonly referred to as the 0B' string), including both open and closed strings, non-supersymmetric but free of tachyons:

- AS, “Some properties of open string theories”, arXiv:hep-th/9509080, presented at SUSY '95 (Palaiseau, giugno 1995) [186 cites];
- AS, “Surprises in open-string perturbation theory”, Nucl. Phys. Proc. Suppl. 56B (1997) 332 [arXiv:hep-th/9702093] [167 cites].

- The identification of two novel phenomena related to the breaking of supersymmetry that can manifest themselves in the presence of open strings, “brane supersymmetry” and “brane supersymmetry breaking”, and a study of supersymmetric magnetic deformations of open-string spectra (equivalent to the introduction of suitably rotated branes, of interest for recent attempts to extend the Standard Model of Particle Physics):

- I. Antoniadis, E. Dudas and AS, “Supersymmetry breaking, open strings and M-theory”, Nucl. Phys. B544 (1999) 469 [arXiv:hep-th/9807011] [152 cites];
- I. Antoniadis, E. Dudas and AS, “Brane supersymmetry breaking”, Phys. Lett. B464 (1999) 38 [arXiv:hep-th/9908023] [293 cites];
- C. Angelantonj, I. Antoniadis, G. D'Appollonio, E. Dudas and AS, “Type I vacua with brane supersymmetry breaking,” Nucl. Phys. B572 (2000) 36 [hep-th/9911081] [195 cites].
- C. Angelantonj, I. Antoniadis, E. Dudas and AS, “Type-I strings on magnetised orbifolds and brane transmutation”, Phys. Lett. B489 (2000) 223 [arXiv:hep-th/0007090] [325 cites].

- A review article for Physics Reports on orientifold constructions:

- C. Angelantonj and AS, “Open strings”, Phys. Rept. 371 (2002) 1 [Erratum-ibid. 376 (2003) 339] [arXiv:hep-th/0204089] [458 cites].

- The geometrical description, along the lines on the spin-1 (Maxwell) and spin-2 (Einstein) cases, for free higher-spin gauge fields:

- D. Francia and AS, “Free geometric equations for higher spins”, Phys. Lett. B543 (2002) 303 [arXiv:hep-th/0207002] [244 cites];
- D. Francia and AS, “On the geometry of higher-spin gauge fields”, Class.Quant. Grav. 20 (2003) S473 [arXiv:hep-th/0212185] [207 cites];
- D. Francia and AS, “Minimal local Lagrangians for higher-spin geometry”, Phys. Lett. B624 (2005) 93 [arXiv:hep-th/0507144] [92 cites];

- AS and M. Tsulaia, “On higher spins and the tensionless limit of string theory”, Nucl. Phys. B682 (2004) 83 [arXiv:hep-th/0311257] [244 cites];
- D. Francia, J. Mourad and AS, “Current exchanges and unconstrained higher spins”, Nucl. Phys. B773 (2007) 203 [arXiv:hep-th/0701163] [122 cites];
- D. Francia, J. Mourad and AS, “(A)dS exchanges and partially-massless higher spins”, Nucl. Phys. B804 (2008) 383 [arXiv:0803.3832 [hep-th]] [53 cites].
- A. Campoleoni, D. Francia, J. Mourad and AS, “Unconstrained Higher Spins of Mixed Symmetry. I. Bose Fields”, Nucl. Phys. B815 (2009) 289 [arXiv:0810.4350 [hep-th]] [87 cites].
- A. Campoleoni, D. Francia, J. Mourad and AS, “Unconstrained Higher Spins of Mixed Symmetry. II. Fermi Fields”, Nucl. Phys. B828 (2010) 405 [arXiv:0904.4447 [hep-th]] [65 cites].

- The identification, starting from String Theory, of conserved currents and cubic couplings for massless higher-spin fields:

- AS and M. Taronna, “String Lessons for Higher-Spin Interactions,” Nucl. Phys. B842 (2011) 299 [arXiv:1006.5242 [hep-th]] [177 cites].

- The proposal of a mechanism linking (high-scale) SUSY breaking and the onset of inflation, motivated by the “brane SUSY breaking” mechanism described above, and the investigation of its possible role in connection with the low value of the CMB quadrupole:

- E. Dudas, N. Kitazawa and AS, “On Climbing Scalars in String Theory,” Phys. Lett. B694 (2010) 80 [arXiv:1009.0874 [hep-th]].
- E. Dudas, N. Kitazawa, S.P. Patil and AS, “CMB Imprints of a Pre-Inflationary Climbing Phase”, JCAP 1205 (2012) 012 [arXiv:1202.6630 [hep-th]] [71 cites].
- AS, “Brane SUSY breaking and inflation: implications for scalar fields and CMB distortion”, Phys. Part. Nucl. Lett. 11 (2014) 836 [arXiv:1303.6685 [hep-th]].
- P. Fré, AS and A.S. Sorin, “Integrable Scalar Cosmologies I. Foundations and links with String Theory”, Nucl. Phys. B877 (2013) 1028 [arXiv:1307.1910 [hep-th]] [73 cites].
- N. Kitazawa and AS, “Pre-inflationary clues from String Theory?”, JCAP 1404 (2014) 017 [arXiv:1402.1418 [hep-th]].
- A. Gruppuso, N. Kitazawa, N. Mandolesi, P. Natoli and AS, “Pre-Inflationary Relics in the CMB?”, Phys. Dark Univ. 11 (2016) 68 [arXiv:1508.00411 [astro-ph.CO]].
- A. Gruppuso, N. Kitazawa, M. Lattanzi, N. Mandolesi, P. Natoli and AS, “The Evens and Odds of CMB Anomalies,” arXiv:1712.03288 [astro-ph.CO], Phys. Dark Univ. 20 (2018) 49 [arXiv:1712.03288 [astro-ph.CO]].

- Constrained superfields and non-linearly realized supersymmetry, with applications to Cosmology:

- I. Antoniadis, E. Dudas, S. Ferrara and A. Sagnotti, “The Volkov-Akulov-Starobinsky supergravity”, Phys. Lett. B733 (2014) 32 [arXiv:1403.3269 [hep-th]] [196 cites].
- E. Dudas, S. Ferrara, A. Kehagias and AS, “Properties of Nilpotent Supergravity,” JHEP 1509 (2015) 217 [arXiv:1507.07842 [hep-th]] [84 cites].
- S. Ferrara, M. Porrati and AS, “Scale invariant Volkov–Akulov supergravity,” Phys. Lett. B749 (2015) 589 [arXiv:1508.02939 [hep-th]].

- E. Dudas, S. Ferrara and AS, "A superfield constraint for $N=2 \rightarrow N=0$ breaking," JHEP 1708 (2017) 109 [arXiv:1707.03414 [hep-th]].

- Abelian Multi-Field Generalizations of Born-Infeld Theory:

- S. Ferrara, M. Porrati and AS, "N = 2 Born-Infeld attractors," JHEP 1412 (2014) 065 [arXiv:1411.4954 [hep-th]].
- S. Ferrara, M. Porrati, AS, R. Stora and A. Yeranyan, "Generalized Born-Infeld Actions and Projective Cubic Curves," Fortsch. Phys. 63 (2015) 189 [arXiv:1412.3337 [hep-th]]

- String Vacua with Broken Supersymmetry and Stability Issues:

- E. Dudas, J. Mourad and AS, "Charged and uncharged D-branes in various string theories," Nucl. Phys. B620 (2002) 109 [hep-th/0107081] [66 cites].
- E. Dudas, G. Pradisi, M. Nicolosi and AS, "On tadpoles and vacuum redefinitions in string theory," Nucl. Phys. B708 (2005) 3 [hep-th/0410101] [69 cites].
- J. Mourad and AS, "AdS Vacua from Dilaton Tadpoles and Form Fluxes," Phys. Lett. B768 (2017) 92 [arXiv:1612.08566 [hep-th]].
- I. Basile, J. Mourad and AS, "On Classical Stability with Broken Supersymmetry," JHEP 1901 (2019) 174 [arXiv:1811.11448 [hep-th]].
- J. Mourad and A. Sagnotti, "On boundaries, charges and Fermi fields," Phys. Lett. B804 (2020), 135368 [arXiv:2002.05372 [hep-th]].
- P. Pelliconi and AS, "Integrable Models and Supersymmetry Breaking," Nucl. Phys. B965 (2021), 115363 [arXiv:2102.06184 [hep-th]].
- J. Mourad and AS, "String (In)Stability Issues with Broken Supersymmetry," [arXiv:2107.04064 [hep-th]]. Invited contribution to the special issue of Letters in High Energy Physics (LHEP-219 (2021)) on "Swampland and String Theory Landscape", edited by I. Antoniadis, K. Benakli and E. Dudas.
- J. Mourad and AS, "On Warped String Vacuum Profiles and Cosmologies, I. Supersymmetric Strings," [arXiv:2109.06852 [hep-th]].
- J. Mourad and AS, "On Warped String Vacuum Profiles and Cosmologies, II. Non-Supersymmetric Strings," [arXiv:2109.12328 [hep-th]].

List of Publications (as of December, 2021)

1) Electromagnetic Waves in a Bianchi Type I Universe

By A. Sagnotti, B. Zwiebach.

Phys.Rev. D24 (1981) 305-319.

2) Properties Of Eleven-dimensional Supergravity

By Augusto Sagnotti, Theodore N. Tomaras, Caltech preprint.

- 3) Tree Level Constraints on Gauge Groups for Type I Superstrings
By Neil Marcus, Augusto Sagnotti.
Phys.Lett. 119B (1982) 97-99.
- 4) Topics In Supersymmetry Theory. 1. A Superspace Action For Ten-dimensional Supersymmetric Yang-mills Theory In Terms Of Four-dimensional Superfields. 2. Gauge Groups For Type I Superstrings
By Augusto Sagnotti.
- 5) Ten-dimensional Supersymmetric {Yang-Mills} Theory in Terms of Four-dimensional Superfields
By Neil Marcus, Augusto Sagnotti, Warren Siegel.
Nucl.Phys. B224 (1983) 159.
- 6) Infinite Symmetry Algebras of Extended Supergravity Theories
By Neil Marcus, Augusto Sagnotti, John H. Schwarz.
Nucl.Phys. B243 (1984) 335-349.
- 7) A Test of Finiteness Predictions for Supersymmetric Theories
By Neil Marcus, Augusto Sagnotti.
Phys.Lett. 135B (1984) 85-90.
- 8) A Simple Method for Calculating Counterterms
By Neil Marcus, Augusto Sagnotti.
Nuovo Cim. A87 (1985) 1.
- 9) The Ultraviolet Behavior of $N=4$ {Yang-Mills} and the Power Counting of Extended Superspace
By Neil Marcus, Augusto Sagnotti.
Nucl.Phys. B256 (1985) 77-108.
- 10) Ultraviolet Divergences And Supersymmetric Theories
By Augusto Sagnotti.
- 11) Quantum Gravity At Two Loops
By Marc H. Goroff, Augusto Sagnotti.
Phys.Lett. 160B (1985) 81-86.
- 12) The Ultraviolet Behavior of Einstein Gravity
By Marc H. Goroff, Augusto Sagnotti.
Nucl.Phys. B266 (1986) 709-736.
- 13) The Ultraviolet Divergences Of Gravity Theories

By Marc H. Goroff, Augusto Sagnotti. Proc. Ma. Grossman Meeting, Roma, 1985.

14) String Field Theory and Equations of Motion

By Neil Marcus, Augusto Sagnotti.

Phys.Lett. B178 (1986) 343-349.

15) Group Theory from Quarks at the Ends of Strings

By Neil Marcus, Augusto Sagnotti.

Phys.Lett. B188 (1987) 58-64.

16) Brst Quantization And Brst Cohomology

By Neil Marcus, Augusto Sagnotti, Proc. S. Diego Conference, 1985.

17) Open Strings and their Symmetry Groups

By Augusto Sagnotti.

hep-th/0208020.

IN *CARGESE 1987, PROCEEDINGS, NONPERTURBATIVE QUANTUM FIELD THEORY* 521-528 AND ROME II UNIV. - ROM2F-87-025 (87,REC.MAR.88) 12p.

18) The Partition Function of the SO(8192) Bosonic String

By Massimo Bianchi, Augusto Sagnotti.

Phys.Lett. B211 (1988) 407-416.

19) Open String Orbifolds

By Gianfranco Pradisi,

Phys.Lett. B216 (1989) 59-67.

20) Orbifolds And Open Strings

By Gianfranco Pradisi, Augusto Sagnotti.

In *Perth 1988, Proceedings, Recent developments in theoretical and experimental general relativity, gravitation and relativistic field theories, pt. A* 833-840 and Rome II Univ. - ROM2F-88-018 (88,rec.Mar.89) 8 p.

21) The Geometry Of Open String Partition Functions

By Massimo Bianchi, Augusto Sagnotti.

22) Closed Strings and Their Open String Descendants

By Augusto Sagnotti.

Phys.Rept. 184 (1989) 167-175.

23) Open Strings and the Relative Modular Group

By Massimo Bianchi, Augusto Sagnotti.

Phys.Lett. B231 (1989) 389-396.

- 24) Gauged Supergravity Vacua in String Theory
By Ignatios Antoniadis, C. Bachas, A. Sagnotti.
Phys.Lett. B235 (1990) 255-260.
- 25) On the systematics of open string theories
By Massimo Bianchi, Augusto Sagnotti.
Phys.Lett. B247 (1990) 517-524.
- 26) Twist symmetry and open string Wilson lines
By Massimo Bianchi, Augusto Sagnotti.
Nucl.Phys. B361 (1991) 519-538.
- 27) Recent developments in open string theories
By Augusto Sagnotti.
In *Moscow 1991, Proceedings, Sakharov memorial lectures in physics, vol. 1* 513-534 and
Rome II Univ. - ROM2F-91-011 (91/06,rec.Sep.) 23 p.
- 28) Planar duality in the discrete series
By M. Bianchi, G. Pradisi, A. Sagnotti.
Phys.Lett. B273 (1991) 389-398.
- 29) Toroidal compactification and symmetry breaking in open string theories
By M. Bianchi, G. Pradisi, A. Sagnotti.
Nucl.Phys. B376 (1992) 365-386.
- 30) Anomaly cancellations and open string theories
By Augusto Sagnotti.
hep-th/9302099.
- 31) A Note on the Green-Schwarz mechanism in open string theories
By Augusto Sagnotti.
hep-th/9210127.
Phys.Lett. B294 (1992) 196-203.
- 32) New developments in open string theories
By Gianfranco Pradisi, Augusto Sagnotti.
hep-th/9211084.
- 33) Sewing constraints and nonorientable open strings
By D. Fioravanti, G. Pradisi, A. Sagnotti.
hep-th/9311183.
Phys.Lett. B321 (1994) 349-354.
- 34) String theory, quantum gravity and the unification of the fundamental interactions.

Proceedings, Meeting, Rome, Italy, September 21-26, 1992
By M. Bianchi, F. Fucito, E. Marinari, A. Sagnotti.
Singapore, Singapore: World Scientific (1993) 524 p.

35) Shock waves and the vacuum structure of gauge theories
By Maurizio Martellini, Augusto Sagnotti, Mauro Zeni.
hep-th/9411088.

In *Como 1994, Proceedings, Quark confinement and the hadron spectrum* 247-250, and
Milan U. - IFUM-471-FT (94/10,rec.Nov.) 7 p. Rome II U. - ROM2F-94-043 (94/10,rec.Nov.)
7 p.

36) Observations on the systematics of open string theories
By Massimo Bianchi, Augusto Sagnotti. SIGRAV Prize 1994 Address.

37) Planar duality in SU(2) WZW models
By G. Pradisi, A. Sagnotti, Ya S. Stanev.
hep-th/9503207.
Phys.Lett. B354 (1995) 279-286.

38) The Open descendants of nondiagonal SU(2) WZW models
By G. Pradisi, A. Sagnotti, Ya.S. Stanev.
hep-th/9506014.
Phys.Lett. B356 (1995) 230-238.

39) Some properties of open string theories
By Augusto Sagnotti.
hep-th/9509080.
In *Palaiseau 1995, Susy 95* 473-484.

40) Completeness conditions for boundary operators in 2-D conformal field theory
By G. Pradisi, A. Sagnotti, Ya.S. Stanev.
hep-th/9603097.
Phys.Lett. B381 (1996) 97-104.

41) Low-energy analysis of M and F theories on Calabi-Yau threefolds
By Sergio Ferrara, Ruben Minasian, Augusto Sagnotti.
hep-th/9604097.
Nucl.Phys. B474 (1996) 323-342.

42) Open descendants in conformal field theory
By Augusto Sagnotti, Yassen S. Stanev.
hep-th/9605042.
Fortsch.Phys. 44 (1996) 585-596, Nucl.Phys.Proc.Suppl. 55B (1997) 200-209,
Nucl.Phys.Proc.Suppl. 55 (1997) 200.

- 43) Chiral asymmetry in four-dimensional open string vacua
By C. Angelantonj, M. Bianchi, G. Pradisi, A. Sagnotti, Ya.S. Stanev.
hep-th/9606169.
Phys.Lett. B385 (1996) 96-102.
- 44) Twelve-dimensional aspects of four-dimensional N=1 type I vacua
By M. Bianchi, S. Ferrara, G. Pradisi, A. Sagnotti, Ya.S. Stanev.
hep-th/9607105.
Phys.Lett. B387 (1996) 64-70.
- 45) Comments on Gepner models and type I vacua in string theory
By Carlo Angelantonj, Massimo Bianchi, Gianfranco Pradisi, Augusto Sagnotti, Yassen S. Stanev.
hep-th/9607229.
Phys.Lett. B387 (1996) 743-749.
- 46) Surprises in open string perturbation theory
By Augusto Sagnotti.
hep-th/9702093.
Nucl.Phys.Proc.Suppl. 56B (1997) 332-343.
- 47) Some properties of tensor multiplets in six-dimensional supergravity
By Fabio Riccioni, Augusto Sagnotti.
hep-th/9711077.
2) Nucl.Phys.Proc.Suppl. 67 (1998) 68-73.
- 48) Tensor and vector multiplets in six-dimensional supergravity
By Sergio Ferrara, Fabio Riccioni, Augusto Sagnotti.
hep-th/9711059.
Nucl.Phys. B519 (1998) 115-140.
- 49) Selfdual tensors in six-dimensional supergravity
By Fabio Riccioni, Augusto Sagnotti.
hep-th/9812042.
In *Trieste 1998, Nonperturbative aspects of strings, branes and supersymmetry* 241-253.
- 50) Consistent and covariant anomalies in six-dimensional supergravity
By Fabio Riccioni, Augusto Sagnotti.
hep-th/9806129.
Phys.Lett. B436 (1998) 298-305.
- 51) Supersymmetry breaking, open strings and M theory
By Ignatios Antoniadis, E. Dudas, A. Sagnotti.

hep-th/9807011.

Nucl.Phys. B544 (1999) 469-502.

52) Partial breaking of supersymmetry, open strings and M theory

By Ignatios Antoniadis, G. D'Appollonio, E. Dudas, A. Sagnotti.

hep-th/9812118.

Nucl.Phys. B553 (1999) 133-154.

53) Open descendants of $Z(2) \times Z(2)$ freely acting orbifolds

By Ignatios Antoniadis, G. D'Appollonio, E. Dudas, A. Sagnotti.

hep-th/9907184.

Nucl.Phys. B565 (2000) 123-156.

54) Brane supersymmetry breaking

By Ignatios Antoniadis, E. Dudas, A. Sagnotti.

hep-th/9908023.

Phys.Lett. B464 (1999) 38-45.

55) Type I vacua with brane supersymmetry breaking

By C. Angelantonj, Ignatios Antoniadis, G. D'Appollonio, E. Dudas, A. Sagnotti.

hep-th/9911081.

Nucl.Phys. B572 (2000) 36-70.

56) Mass scales, supersymmetry breaking and open strings

By Ignatios Antoniadis, A. Sagnotti.

hep-th/9911205.

Class.Quant.Grav. 17 (2000) 939-950.

57) Open string models with broken supersymmetry

By Augusto Sagnotti.

hep-th/0001077.

Nucl.Phys.Proc.Suppl. 88 (2000) 160-167.

58) Type I vacua and brane transmutation

By Carlo Angelantonj, Augusto Sagnotti.

hep-th/0010279.

59) Type I strings on magnetized orbifolds and brane transmutation

By C. Angelantonj, Ignatios Antoniadis, E. Dudas, A. Sagnotti.

hep-th/0007090.

Phys.Lett. B489 (2000) 223-232.

60) Type-I vacua and brane transmutation

By C. Angelantonj, Augusto Sagnotti.

- 61) Charged and uncharged D-branes in various string theories
By E. Dudas, J. Mourad, A. Sagnotti.
hep-th/0107081.
Nucl.Phys. B620 (2002) 109-151.
- 62) Open strings
By Carlo Angelantonj, Augusto Sagnotti.
hep-th/0204089.
- 3) Phys.Rept. 371 (2002) 1-150, Erratum: Phys.Rept. 376 (2003) no.6, 407.
- 63) Free geometric equations for higher spins
By Dario Francia, Augusto Sagnotti.
hep-th/0207002.
Phys.Lett. B543 (2002) 303-310.
- 64) Strings, gravity and particle physics
By Augusto Sagnotti, Alexander Sevrin.
hep-ex/0209011.
Riv.Nuovo Cim. 31 (2008) 423-456.
- 65) On the geometry of higher spin gauge fields
By Dario Francia, Augusto Sagnotti.
hep-th/0212185.
Class.Quant.Grav. 20 (2003) S473-S486, Comment.Phys.Math.Soc.Sci.Fenn. 166 (2004) 165-189, PoS JHW2003 (2003) 005.
- 66) On higher spins and the tensionless limit of string theory
By A. Sagnotti, M. Tsulaia.
hep-th/0311257.
Nucl.Phys. B682 (2004) 83-116.
- 67) On higher spins with a strong $Sp(2,R)$ condition
By A. Sagnotti, E. Sezgin, P. Sundell.
hep-th/0501156.
- 68) An Introduction to free higher-spin fields
By N. Bouatta, G. Compere, A. Sagnotti.
Lectures at the HS Solvay Workshop, hep-th/0409068.
- 69) On tadpoles and vacuum redefinitions in string theory
By E. Dudas, G. Pradisi, M. Nicolosi, A. Sagnotti.
hep-th/0410101.
Nucl.Phys. B708 (2005) 3-44.

70) Minimal local Lagrangians for higher-spin geometry

By Dario Francia, Augusto Sagnotti.

hep-th/0507144.

Phys.Lett. B624 (2005) 93-104.

71) Higher-spin geometry and string theory

By Dario Francia, Augusto Sagnotti.

hep-th/0601199.

J.Phys.Conf.Ser. 33 (2006) 57.

72) Current Exchanges and Unconstrained Higher Spins

By Dario Francia, J. Mourad, A. Sagnotti.

hep-th/0701163.

Nucl.Phys. B773 (2007) 203-237.

73) (A)dS exchanges and partially-massless higher spins

By Dario Francia, J. Mourad, A. Sagnotti.

arXiv:0803.3832 [hep-th].

Nucl.Phys. B804 (2008) 383-420.

74) Unconstrained Higher Spins of Mixed Symmetry. I. Bose Fields

By Andrea Campoleoni, Dario Francia, Jihad Mourad, Augusto Sagnotti.

arXiv:0810.4350 [hep-th].

Nucl.Phys. B815 (2009) 289-367.

75) Unconstrained Higher Spins of Mixed Symmetry. II. Fermi Fields

By A. Campoleoni, D. Francia, J. Mourad, A. Sagnotti.

arXiv:0904.4447 [hep-th].

4) Nucl.Phys. B828 (2010) 405-514.

76) Higher Spins and Current Exchanges

By A. Sagnotti.

arXiv:1002.3388 [hep-th].

PoS CORFU2011 (2011) 106.

77) String Lessons for Higher-Spin Interactions

By A. Sagnotti, M. Taronna.

arXiv:1006.5242 [hep-th].

Nucl.Phys. B842 (2011) 299-361.

78) On Climbing Scalars in String Theory

By E. Dudas, N. Kitazawa, A. Sagnotti.

arXiv:1009.0874 [hep-th].

Phys.Lett. B694 (2011) 80-88.

79) String Theory and The Velo-Zwanziger Problem
By Massimo Porrati, Rakibur Rahman, Augusto Sagnotti.
arXiv:1011.6411 [hep-th].
Nucl.Phys. B846 (2011) 250-282.

80) Notes on Strings and Higher Spins
By A. Sagnotti.
arXiv:1112.4285 [hep-th].
J.Phys. A46 (2013) 214006.

81) CMB Imprints of a Pre-Inflationary Climbing Phase
By E. Dudas, N. Kitazawa, S.P. Patil, A. Sagnotti.
arXiv:1202.6630 [hep-th].
JCAP 1205 (2012) 012.

82) Brane SUSY breaking and inflation: implications for scalar fields and CMB distortion
By A. Sagnotti.
arXiv:1303.6685 [hep-th].
Phys.Part.Nucl.Lett. 11 (2014) 836-843.

83) Integrable Scalar Cosmologies I. Foundations and links with String Theory
By P. Fré, A. Sagnotti, A.S. Sorin.
arXiv:1307.1910 [hep-th].
Nucl.Phys. B877 (2013) 1028-1106.

84) Pre-inflationary clues from String Theory?
By N. Kitazawa, A. Sagnotti.
arXiv:1402.1418 [hep-th].
JCAP 1404 (2014) 017.

85) The Volkov–Akulov–Starobinsky supergravity
By I. Antoniadis, E. Dudas, S. Ferrara, A. Sagnotti.
arXiv:1403.3269 [hep-th].
Phys.Lett. B733 (2014) 32-35.

86) $N = 2$ Born-Infeld attractors
By S. Ferrara, M. Porrati, A. Sagnotti.
arXiv:1411.4954 [hep-th].
JHEP 1412 (2014) 065.

87) String theory clues for the low- ℓ CMB ?
By N. Kitazawa, A. Sagnotti.

arXiv:1411.6396 [hep-th].
EPJ Web Conf. 95 (2015) 03031.

88) Generalized Born--Infeld Actions and Projective Cubic Curves
By S. Ferrara, M. Porrati, A. Sagnotti, R. Stora, A. Yeranyan.
arXiv:1412.3337 [hep-th].
Fortsch.Phys. 63 (2015) 189-197.

89) Massive Born--Infeld and Other Dual Pairs
By S. Ferrara, A. Sagnotti.
arXiv:1502.01650 [hep-th].
JHEP 1504 (2015) 032.

90) A string-inspired model for the low- ℓ CMB
By N. Kitazawa, A. Sagnotti.
arXiv:1503.04483 [hep-th].
Mod.Phys.Lett. A30 (2015) no.28, 1550137.

91) Doubly Self-Dual Actions in Various Dimensions
By S. Ferrara, A. Sagnotti, A. Yeranyan.
arXiv:1503.04731 [hep-th].
JHEP 1505 (2015) 051.

92) Some Pathways in non-Linear Supersymmetry: Special Geometry Born-Infeld's,
Cosmology and dualities
By S. Ferrara, A. Sagnotti.
p-Adic Numbers, Ultrametric Analysis and Applications, 2015, Vol. 7, No. 4, pp. 291–311.
arXiv:1506.05730 [hep-th].

93) Observational Hints of a Pre--Inflationary Scale?
By A. Gruppuso, A. Sagnotti.
arXiv:1506.08093 [astro-ph.CO].
Int.J.Mod.Phys. D24 (2015) no.12, 1544008.

94) Properties of Nilpotent Supergravity
By E. Dudas, S. Ferrara, A. Kehagias, A. Sagnotti.
arXiv:1507.07842 [hep-th].
JHEP 1509 (2015) 217.

95) Pre-Inflationary Relics in the CMB?
By A. Gruppuso, N. Kitazawa, N. Mandolesi, P. Natoli, A. Sagnotti.
arXiv:1508.00411 [astro-ph.CO].
Phys.Dark Univ. 11 (2016) 68-73.

- 96) Scale invariant Volkov–Akulov supergravity
By S. Ferrara, M. Porrati, A. Sagnotti.
arXiv:1508.02939 [hep-th].
Phys.Lett. B749 (2015) 589-591.
- 97) Supersymmetry and Inflation
By A. Sagnotti, Sergio Ferrara.
arXiv:1509.01500 [hep-th].
Proceedings of MGM 15 (Rome, July 12-18 2015)
PoS PLANCK2015 (2015) 113.
- 98) Low- ℓ CMB from string-scale SUSY breaking?
By A. Sagnotti.
arXiv:1509.08204 [astro-ph.CO].
Mod.Phys.Lett. A32 (2016) no.01, 1730001.
- 99) Two-field Born–Infeld with diverse dualities
By S. Ferrara, A. Sagnotti, A. Yeranyan.
arXiv:1602.04566 [hep-th].
Nucl.Phys. B912 (2016) 305-326.
- 100) Higher Curvature Supergravity and Cosmology
By Sergio Ferrara, Augusto Sagnotti.
Fortsch.Phys. 64 (2016) 371-375.
- 101) Cosmology and Supergravity
By S. Ferrara, A. Kehagias, A. Sagnotti.
arXiv:1605.04791 [hep-th].
Int.J.Mod.Phys. A31 (2016) no.25, 1630044.
- 102) AdS Vacua from Dilaton Tadpoles and Form Fluxes
By J. Mourad, A. Sagnotti.
arXiv:1612.08566 [hep-th].
Phys.Lett. B768 (2017) 92-96.
- 103) Supergravity at 40: Reflections and Perspectives
By S. Ferrara, A. Sagnotti.
arXiv:1702.00743 [hep-th].
Riv.Nuovo Cim. 40 (2017) no.6, 1.
- 104) A superfield constraint for $N = 2 \rightarrow N = 0$ breaking
By E. Dudas, S. Ferrara, A. Sagnotti.
arXiv:1707.03414 [hep-th].
JHEP 1708 (2017) 109.

105) An Update on Brane Supersymmetry Breaking

By J. Mourad, A. Sagnotti.

arXiv:1711.11494 [hep-th].

Based on the Erice 2017 lecture of AS.

106) The Evens and Odds of CMB Anomalies

By A. Gruppuso, N. Kitazawa, M. Lattanzi, N. Mandolesi, P. Natoli, A. Sagnotti.

arXiv:1712.03288 [astro-ph.CO].

Phys.Dark Univ. 20 (2018) 49-64.

107) On Classical Stability with Broken Supersymmetry

By I. Basile, J. Mourad and A. Sagnotti.

JHEP 1901 (2019) 174

[arXiv:1811.11448 [hep-th]].

108) The Incomplete Revolutions of String Theory

By A. Sagnotti.

Il Nuovo Saggiatore, Vol. 35, n. 3-4 (2019) 47.

109) On Boundaries, Charges and Fermi Fields

By J. Mourad and A. Sagnotti

Phys. Lett. B804 (2020) 135368

[arXiv:2002.05372]

110) Integrable Models and Supersymmetry Breaking

By P. Pelliconi and A. Sagnotti,

Nuclear Physics B965 (2021) 115363

[arXiv:2102.06184 [hep-th]]

111) String (In)Stability Issues with Broken Supersymmetry

By J. Mourad and A. Sagnotti

Invited contribution to the special issue of Letters in High Energy Physics (LHEP-219-(2021))

on “Swampland and String Theory Landscape”, edited by I. Antoniadis, K. Benakli and E.

Dudas [arXiv:2107.04064 [hep-th]]

112) On Warped String Vacuum Profiles and Cosmologies, I. Supersymmetric Strings

By J. Mourad and A. Sagnotti

[arXiv:2109.06852 [hep-th]]

to appear in JHEP

113) On Warped String Vacuum Profiles and Cosmologies, II. Non-Supersymmetric Strings

By J. Mourad and A. Sagnotti

[arXiv:2109.12328 [hep-th]]

