Curriculum Vitae

of

Carlo Angelantonj

(December 2021)

Date and Place of Birth: 6th December 1969 – Sulmona, Italy
Professional Address: Dipartimento di Fisica, Via P. Giuria 1, I-10125 Torino
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Education

- 30/04/1994: Laurea in Physics *magna cum Laude*, University of L'Aquila, Italy. Advisor: Prof. Franco Occhionero. Thesis's title: *"String Cosmology"*
- 05/05/1998: PhD degree in Physics. Advisors: Proff. M. Bianchi and A. Sagnotti. Thesis's title: *"Type I Superstring Dynamics in Various Dimensions"*

Employment History

- 01/09/1998 – 31/08/1999: Postdoctoral fellow at the Centre de Physique Théorique, Ecole Polytechnique, Paris;
- 01/09/1999 – 30/04/2000: Postdoctoral fellow at the Laboratoire de Physique Théorique de l'Ecole Normale Supérieure, Paris;
- 01/05/2000 – 31/12/2001: **Marie-Curie Fellow** at the Centre de Physique Théorique, Ecole Polytechnique, Paris (Marie-Curie contract: HPMF-CT-1999-00256);
- 01/01/2002 – 31/12/2003: **CERN Fellow** at the Theory Division - CERN, Geneva;
- 01/01/2004 – 31/12/2005: **Alexander von Humboldt Fellow** at the Institut für Physik, of Humboldt Universität zu Berlin and of Ludwig-Maximilian Universität, München;
- 01/01/2005 - 30/09/2015: **Assistant Professor** at Department of Theoretical Physics, Turin, Italy.
- 01/10/2015 - 30/11/2021: **Associate Professor** at Department of Physics, Turin, Italy.
- Since 01/12/2021: **Full Professor** at Department of Physics, Turin, Italy.

Awards and Honours

- Marie-Curie Fellowship (2000-2001)
- Alexander von Humboldt Fellowship (2004)
- SIGRAV Prize of the Italian Society for Gravitation (2004)
- Scientific National Habilitation (ASN) for Associate Professor in Theoretical Physics (2012)
- Scientific National Habilitation (ASN) for Full Professor in Theoretical Physics (2012)

SCIENTIFIC ACTIVITY

My research is in the domain of High Energy Theoretical Physics, and focusses on *Superstring Theory, D-branes, Supersymmetry breaking, Supergravity.* I have been invited to present my work in several international conferences. I have been invited to deliver lectures in PhD programs and at international schools, and have visited numerous best Institutions World-Wide, where I have also presented my recent scientific work.

My work has almost 2800 citations, and includes three famous papers (+250 citations), three very well-known papers (+100 citations) and ten well-known papers (+50 citations). The overall number of citations per paper is over 60.

I have been regularly invited to visit top Institutions in Europe and World-Wide (Humboldt University at Berlin, MPI at Golm, LMU and MPI at Munich, Department of Theoretical Physics at Oxford, Centre de Physique Théorique at Ecole Polytechnique, Paris, Laboratoire de Physique Théorique at Ecole Normale Supérieure, Paris, Imperial College and Queen Mary College at London, Theory Unit at CERN, Liverpool University at Liverpool, Hebrew University at Jerusalem, IPM at Teheran, KITP at Santa Barbara, University of Crete, Physics Department at Seul, Shanghai Institute for Theoretical Physics at Shanghai, Sydney University at Sydney, University of Canberra at Canberra, Albert Einstein Center of the Institute of Physics of Bern University, …).

From 09/2011 until 08/2012 and from 01/2019 uni 04/2019 I have been Paid Associate at the PH-TH Unit, CERN.

I have benefitted from the World-Wide Style program of the University of Torino in 2008.

TEACHING ACTIVITY

I have been involved in a regular teaching activity, both at the University of Turin and in International PhD schools.

In more details at the University of Turin I have held the courses

- A.Y. 2020/21: Quantum Mechanics (at Mathematics; 48h), Quantum Field Theory (at Physics; 48h), Physics (at Biology; 40h)
- A.Y. 2019/20: Introduction to String Theory (48h), Analytical Mechanics (tutoring; 24h), Physics for Biologists (40h), Relativistic Quantum Mechanics (8h);
- A.Y. 2018/19: Introduction to String Theory (48h), Analytical Mechanics (tutoring; 24h), Physics for Biologists (40h), Relativistic Quantum Mechanics (8h);;
- A.Y. 2017/18: Introduction to String Theory (48h), Analytical Mechanics (tutoring; 24h), Physics for Biologists (40h), Relativistic Quantum Mechanics (8h);
- A.Y. 2016/17: Statistical Mechanics (48h), Introduction to String Theory (48h), Analytical Mechanics (tutoring; 24h);
- A.Y. 2015/16: Statistical Mechanics (48h), Introduction to String Theory (48h), Analytical Mechanics (tutoring; 24h);
- A.Y. 2014/15: Statistical Mechanics (48h), Analytical Mechanics (tutoring; 24h);
- A.Y. 2013/14: Statistical Mechanics (48h), Analytical Mechanics (tutoring; 24h);
- A.Y. 2012/13: Statistical Mechanics (48h), Tutoring of Electromagnetism and Optics (8h);
- A.Y. 2010/11: Tutoring of Electromagnetism and Optics (8h);
- A.Y. 2009/10: Mathematical Methods for Physics II (48h); Quantum Mechanics (at Scienze dei Materiali; 24h);

- A.Y. 2008/09: Mathematical Methods for Physics II (48h); Superstring Theory (graduate students; 24h);
- A.Y. 2007/08: Mathematical Methods for Physics II (48h); Superstring Theory (graduate students; 24h);
- A.Y. 2006/07: Tutoring of Mechanics (24h); Mathematical Methods for Physics II (48h);
- A.Y. 2005/06: Tutoring of Mechanics (24h); Superstring Theory (graduate students; 24h).

I have also held advanced courses in the following international schools

- "Open strings and orientifolds" at the Semestres du Centre Emile Borel "Supergravity, Superstrings and M Theory" at the Institut Henri Poincaré, Paris (http://www.lpt.ens.fr/~cremmer/lstringcourses.htm)
- "Introduction to perturbative string theory" at the International School on High Energy Physics ISHEPAC, Heraklion, Crete in 2002 and 2003 (http://hep.physics.uoc.gr/ISHEPAC/).
- "Introduction to perturbative string theory" held at the Scuola Avanzata di Campi E Stringhe, LACES, held at the Galileo Galilei Institute, Arcetri in 2008 and 2010 (http://cern.ch/Laces/)
- "Introduction to superstring spectra" held at Scuola Normale Superiore, Pisa in 2011.
- Various editions of the Corfù School on "The Standard Model and Beyond" (2001, 2011 and 2014)
- "Introduction to Superstring Theory" held at Scuola Normale Superiore, Pisa in 2019, 2020 and 2021.

Laurea, Master and PhD Students

Over the years I have supervised several Laurea, Master and PhD students. In alphabetical order:

Alberto BASSO (LT)
Alberto BASSO (LM)
Alessandro BERNARDINI (LM)
Claudio BIGLIANI (LM)
Sara BONANSEA (LM)
Matteo CARDELLA (PhD)
Riccardo ESPOSITO (LM)
Francesca FERRARO (LT)
Luca GAMBARANA (LM)
Giorgio LEONE (LM)
Giorgio LEONE (PhD … now)
Enrico MAIOLO (LT)
Bruno MATTIA (LT)
Shani N. MEYNET (LM)
Luca A. NUTRICATI (LM)
Simone OLMI (LT)
Michele RE FIORENTIN (LT)
Dario ROSCO (LM)
Giorgio SARNO (LM)
Davide SCAZZUSO (LT)
Antonio SCIARAPPA (LM)
Davide SCOTTON (LT)
Matteo TROMBOTTO (LT)
Marta VARRONE (LM)
Marta VARRONE (PhD … now)

University Committees

Since 2017 I am member of "Commissione Ricerca" at the University of Torino, Italy.
Since 2018 I am member of the Committee for "Riconoscimento accademico (riconoscimento titoli esteri e crediti esteri/abbreviazioni carriere) at the CCS in Physics.
I have been member of several PhD committees in Italy, France and Greece.

In 2018 I have been member of the selection Committee in Physics for the admission procedure at Scuola Normale Superiore, Pisa.
Since 2021 I am member of the Giunta del Dipartimento di Fisica.
Since 2021 I am member of the Consiglio della Scuola di Scienze della Natura

MOST SIGNIFICANT CONTRIBUTIONS

- *C. Angelantonj, M. Bianchi, G. Pradisi, A. Sagnotti and Ya.S. Stanev, "Chiral asymmetry in four-dimensional open-string vacua", PLB (1996)*: this work describes the first example of orientifold compactifications in four dimensions with three generations of chiral matter, basic ingredients of the Standard Model of Fundamental Interactions.
- *C. Angelantonj, M. Bianchi, G. Pradisi, A. Sagnotti and Ya.S. Stanev, "Comments on Gepner models and type I vacua in string theory", PLB (1996)*: this work contains a first analysis of orientifold constructions of Gepner models in various dimensions, and in particular contains the first (and only-known) example of six-dimensional open-stringa vacua with zero tensor multiplets, whose heterotic dual (yet unknown) should not contain the dilaton field among its light excitations!
- *C. Angelantonj, I. Antoniadis, E. Dudas and A. Sagnotti, "Type I strings on magnetised orbifolds and brane transmutation", PLB (2000)*: this paper is among the firsts to deal with magnetised branes or, in the T-dual version, branes at angles. In particular we show how self-dual magnetic backgrounds can preserve supersymmetry and can be used to build new six-dimensional vacua. Magnetised branes represent the most successful attempts to describe the Standard Model in string theory. In *C. Angelantonj, M. Cardella and N. Irges, "Scherk-Schwarz breaking and intersecting branes", NPB (2005)* we consider the possibility of using Scherk-Schwarz deformations to give masses to ubiquitous non-chiral fermions in vacua with branes at angles.
- *C. Angelantonj and A. Sagnotti, "Open Strings", Phys. Rep. (2000)*: this is a review paper on orientifold constructions.
- *C. Angelantonj, "Non-tachyonic open descendants of the 0B string theory", PLB (1998)*: This is the first paper where an exhaustive study of non-tachyonic non-supersymmetric orientifold compactifications of type 0B string theory is performed. It is based on an extension of deformed orientifold projections introduced by Sagnotti in ten dimensions.
- *C. Angelantonj, "Comments on open string orbifolds with a non-vanishing B_{ab}", NPB (2000); C. Angelantonj and R. Blumenhagen, "Discrete deformations in type I vacua", PLB (2000)*: these papers describe the role played by discrete deformations of the antisymmetric NS-NS tensor and of the off-diagonal components of the internal metric in orbifold constructions of models with open strings. They also give a clean interpretation of previous results in rational conformal field theories.
- *C. Angelantonj, I. Antoniadis and K. Foerger, "Non-supersymmetric type I strings with zero vacuum energy", NPB (1999); C. Angelantonj, I. Antoniadis, G. D'Appollonio, E. Dudas and A. Sagnotti, "Type I vacua with brane supersymmetry breaking", NPB (2000); C. Angelantonj and I. Antoniadis, "Suppressing the cosmological constant in non-supersymmetric type I strings", NPB (2004)*: In these papers we study several mechanisms for breaking supersymmetry in orientifold models, and for the first time build class of orientifold vacua where perturbative vacuum energy is vanishing even without supersymmetry.
- *C. Angelantonj, S. Ferrara and M. Trigiante, "New D = 4 gauged supergravities from N=4 orientifolds with fluxes", JHEP (2003); C. Angelantonj, S. Ferrara and M. Trigiante, "Unusual gauged supergravities from type IIA and type IIB orientifolds", PLB (2004); C. Angelantonj, R. D'Auria, S. Ferrara and M. Trigiante, "K_3 x T^2 / Z_2 orientifolds with fluxes, open string moduli and critical points", PLB (2004)*: We present the low-energy supergravity

description of classes of orientifold models in four dimensions with N=4 and N=2 supersymmetries. We also discuss their possible gaugings whose microscopic description is in terms of fluxes of R-R and NS-NS forms.

- *C. Angelantonj, M. Cardella and N. Irges, "An alternative to moduli stabilisation", PLB (2006), C. Angelantonj, C. Kounnas, H. Partouche and N. Toumbas, "Resolution of Hagedorn singularity in superstrings with gravito-magnetic fluxes", NPB (2009)*: in these projects we have studied superstring vacua at finite temperature and/or with spontaneous supersymmetry breaking. In particular, we have shown that for appropriate choices of the supersymmetry-breaking deformations, the vacuum is free of any kind of Hagedorn-like instability, thus yielding a finite one-loop vacuum energy. Possible phenomenological applications and implications for early non-singular cosmologies and perturbative moduli stabilisation are discussed. In *C. Angelantonj, M. Cardella, S. Elitzur and E. Rabinovici, "Vacuum stability, string density of states and the Riemann zeta function", JHEP (2011)* we address the problem of classical vacuum stability in generic closed string vacua and find a remarkable correlation between the graded distribution of high-mass string states and the non-trivial zeroes of the Riemann zeta function.
- *C. Angelantonj, I. Florakis and B. Pioline, "A new look at one-loop modular integrals", CNTP (2012), "One loop BPS amplitudes as BPS-state sums", JHEP (2012), "Rankin-Selberg methods for closed strings on orbifolds", JHEP (2013), "Threshold corrections, generalised prepotentials and Eichler integrals", NPB (2015)*: In these papers we devise a new way to compute one-loop modular integrals in string theory that, in contrast to the conventional approach, respects manifestly all symmetries (e.g. T-duality) of the problem under study. For this, it can be viewed as an analog of dimensional regularisation against hard cut-off regularisation in field theory. The resulting expression, aside from keeping symmetries manifest and pinpointing the individual contribution of BPS states to the amplitude under study, neatly exhibits its singularity structure at point of gauge symmetry enhancement, in a chamber invariant fashion. The Fourier series representation of the integrals can be conveniently derived and leads naturally to the identification of the (generalised) holomorphic prepotentials with suitable Eichler integrals.
- *C. Angelantonj, I. Florakis and M. Tsulaia, "Universality of gauge thresholds in non-supersymmetric heterotic vacua", PLB (2014)*: In this papers we have pioneered the study of radiative corrections in classically stable heterotic vacua with spontaneously broken supersymmetry. We have found a remarkable, unexpected, universality behaviour in the difference of gauge thresholds associated to different gauge factors.

ORGANISATION OF WORKSHOPS, CONFERENCES AND SCHOOLS

I have co-organised the workshop "*New Directions Beyond the Standard Model in Field and String Theory*" held at the Galileo Galilei Institute for Theoretical Physics (GGI), Florence (May-June, 2006).
I have co-organised the workshop "*String Theory from a World-sheet Perspective*" , held at the Galileo Galilei Institute for Theoretical Physics (GGI), Florence (March 26-May 10, 2019)
I have co-organised the XXX Johns Hopkins workshop "*Where do we go from the standard model?*", Florence, (6-8 June 2006).
I have co-organised the conference *String Field Theory and String Perturbation Theory*, Florence (6-10 May 2019).
I have co-organised the conference "*A String Concert in Torino. A Meeting on Supergravity and Superstrings on the occasion of Riccardo D'Auria's 70th Birthday*" held at Politecnico di Torino, Turin (22-23 April 2010).
I have co-organised the workshop *Strings & Sugra in Piedmont*, held at the University of Torino (6 June 2017)
I have co-organised the inaugural conference of the *Arnold Regge Center for Algebra, Geometry and Physics*, held at University of Torino (28 February - 2 March, 2019)

I have co-organised the conference *On recent developments in Strings and Gravity* held at the Corfu Summer Institute, Corfu, Greece (10 - 16 September, 2019)
I have co-organised the Humboldt Koelleg conference on *Quantum Gravity and Fundamental Interactions*, held in presence/via Zoom in Corfù, Greece (17-21 September, 2021)
For several years, I have organised "String and Sugra" Seminars for the String Theory group and Colloquia at the Physics Department in Torino.

LACES

Together with P.A. Grassi, G. Grignani, L. Griguolo and D. Seminara, I have been the original proposer of the LACES PhD School. Motivated by the fast progress in our understanding of gauge and string theories witnessed in the last 30 years and the difficulties of Italian PhD students to quickly build a solid background in advanced Physics and Mathematics and be highly productive in the three years of their PhD studies, in 2008 we have started a project of PhD School on advanced topics in Gauge and String Theory. The school *LACES - Lezioni Avanzate di Campo E Stringa*, hosted and sponsored by the Galileo Galilei Institute for Theoretical Physics (GGI) has quickly become an institution with a world-wide recognition and success, and has triggered the birth of similar projects on topics which range from Particle Physics Phenomenology to Nuclear Physics, from Statistical Field Theory to Astroparticle Physics and Cosmology.
Until now, we have organised eleven editions of the school (first: November 24-December 12, 2008; second: November 23-December 11, 2009; third: November 22-December 10, 2010; fourth: November 28-December 16, 2011; fifth: December 3-21, 2012, sixth: November 25- December 13, 2013; seventh: November 24-December 12, 2014; eight: November 23-December 11, 2015; ninth: November 21 - December 9, 2016; tenth: November 27 - December 15, 2017, eleventh: November 26 - December 14, 2018, twelfth: November 25 - December 13, 2019).
Distinguished world-wide experts on gauge and string theories from Europe, the United States, Japan and South America have lectured at the various editions of the school which, every year attracts more than 60 students from different countries and continents (with more than 120 applications per year).
More information about the various editions of the LACES School can be found at the web site: http://cern.ch/Laces/.

GRANTS COORDINATOR

I have been directly responsible of the individual grants Marie-Curie (2000-2001) and Alexander von Humboldt (2004-2005).
I have been the coordinator of the Unit of Turin University for the Italian National grants

- MIUR-PRIN 20075ATT78 "Symmetries of the Universe and of Fundamental Interactions";
- MIUR-PRIN 2009KHZKRX-007 "Symmetries of the Universe and of Fundamental Interactions".

I have been team member of the European ERC Advanced Grant *"Supersymmetry, Quantum Gravity and Gauge Fields"* n. 226455 (Principal Investigator Prof. Sergio Ferrara). (link)
I am a member of the Scientific Council of the *Arnold-Regge Center for Algebra, Geometry and Physics* (link)
I am the coordinator of the Torino Unit of the INFN "*Iniziativa Specifica GSS*" (link)

MONOGRAPHS AND REVIEWS

C. Angelantonj and A. Sagnotti, *Open Strings*, Phys. Rept. 371 (2002) 1 [hep-th/0204089].

CONTRIBUTIONS AT CONFERENCES AND SCHOOLS

1. *String cosmology* at "Birth of the Universe and Fundamental Physics", Rome, (May 18 – 21, 1994).
2. *Chiral asymmetry in N=1, D=4 open-string vacua* at E.E.C. Network Meeting on "Field Theory of Particles and Strings" Crete, (September 9 – 13, 1996).
3. *Type I superstrings in various dimensions* at "5th Korean-Italian Meeting on Relativistic Astrophysics", Seoul, Korea, (September 1 – 6, 1997).
4. *Non-supersymmetric open string vacua*, at E.E.C. Network "Physics Beyond the Standard Model" Mid-term Meeting, SISSA Trieste, Italy (February 24 – 27, 1999).
5. *Open string orbifolds in the presence of a non-vanishing* B_{ab}, at Institut d'études scientifiques de Cargese, Cargese, France (May 24 – June 5, 1999).
6. *Non-supersymmetric open string vacua*, at Extended Workshop in String Theory, ICTP Trieste, Italy (June 1 – July 12, 1999).
7. *Open strings on orbifolds and the NS-NS antisymmetric tensor*, at NATO Advanced Study Institute, Akureyri, Iceland (August 10 – 20, 1999).
8. *The conformal field theory of open string models*, at Rencontre GDR "Structure non perturbative en théories des champs et des cordes", Annecy, France (September 8 – 10, 1999).
9. *Type I strings and Orientifolds*, series of Lectures at the Service de Physique Théorique de Saclay (November, 1999).
10. *Susy and susy breaking in type I strings*, at the Ninth Marcel Grossmann Meeting, Rome (July 2 – 8, 2000).
11. *RG flow, Wilson loops and the dilaton tadpole*, at the EUROconference on Quantum Fields and Strings, Kolymbari, Crete, Greece, (September 9 – 15, 2000).
12. *Open String Spectra*, Lectures at the Semestres du Centre Emile Borel "Supergravity, Superstrings and M Theory", Institut Henri Poincaré, (November 24 – December 8, 2000).
13. *Supersymmetry breaking and brane transmutations in type I vacua*, at the RTN meeting "Across the present energy frontier: probing the origin of mass", Oxford, U.K. (December 8--9, 2000).
14. *Aspects of non-supersymmetric open strings*, at the XXXII Institut d'Eté of Ecole Normale Supérieure, Paris (August 13 – 31, 2001).
15. *Aspects of non-supersymmetric open strings*, at the RTN meeting "Across the present energy frontier: probing the origin of mass", Corfu, Greece (September 10 – 13, 2001).
16. *Supersymmetry and supersymmetry breaking in orientifold models*, Lectures at the RTN meeting "The quantum structure of spacetime and the geometric nature of fundamental interactions", Corfu, Greece (September 13 – 20, 2001).
17. *Type I strings on magnetised backgrounds*, at the Conference on Superstring Phenomenology 2002, Oxford (July 6 – 11, 2002).
18. *Type I strings on magnetised backgrounds*, at the XXXIII Institut d'Eté of Ecole Normale Supérieure, Paris (August 19 – 31, 2002).
19. *Type I strings on magnetised backgrounds*, at the 35th international symposium Ahrenshoop on the theory of elementary particles "Recent developments in String/M-theory and Field Theory", Berlin (August 26 – 30, 2002)
20. Lectures at PhD School in Theoretical Physics, Crete, Greece (September – October, 2002)
21. *Suppressing the cosmological constant in non-supersymmetric open-string vacua*, at the Second International Conference on String Phenomenology (SP2003), Durham (July 29 – August 4, 2003).

22. Lectures on open-string theory at the International School on High Energy Physics, Heraklion, Crete (October 9--29, 2003).
23. *Orientifolds, Supersymmetry Breaking and the Cosmological Constant*, Regional Conference on Mathematical Physics & IPM Spring Conference, Tehran, Iran (May 3 – 7, 2004)
24. *Open String Vacua*, XVI SIGRAV Conference on General Relativity and Gravitational Physics, Vietri sul Mare, Italy (September 13 – 16, 2004).
25. *Scherk-Schwarz Deformations and Intersecting Branes*, String Phenomenology 2005, Munich, Germany (June 13--18, 2005).
26. *An Alternative for Moduli Stabilisation*, Strings 2006 Shanghai Workshop, Shanghai, China (June 12 – 14, 2006).
27. *An Alternative for Moduli Stabilisation*, Constituents, Fundamental Forces and Symmetries of the Universe: 2nd midterm meeting, Napoli, Italy (October 9 – 13, 2006).
28. *Superstring Realisations of Supergravity in Ten Dimensions*, 30 Years of Supergravity, ENS Paris, France (October 17 – 20, 2006).
29. *Properties of non-supersymmetric string vacua*, GDR-SUSY 2007, Montpellier, France (May 14 – 16, 2007).
30. *Properties of Superstring Vacua*, XXIX congresso di fisica teorica, Cortona, Italy (May 28 – June 1, 2007).
31. *Quantum stability of non-supersymmetric string vacua*, String Phenomenology 2007, Frascati, Italy (June 4 – 8, 2007).
32. *(meta)stable vacua from non-supersymmetric strings*, PRIN-07 Symmetries of the Universe and of the Fundamental Interactions, Pisa, Italy (December 14–15, 2007).
33. *Non-tachyonic, non-supersymmetric superstrings*, Superstrings@Cyprus, Agia Napa, Cyprus (September 22, 2008).
34. *Finite temperature superstrings without Hagedorn transition*, New Perspectives in String Theory, GGI Arcetri (April 6, 2009).
35. *Stringy instantons on rigid magnetised branes*, String Phenomenology 2009, Warsaw, Poland (June 19, 2009).
36. *The power of modular invariance*, String Phenomenology workshop, Stockholm, Sweden (May 30 – June 25, 2011)
37. *Rankin-Selberg methods for one-loop integrals in string theory*, XLI Institut d'Eté de l'Ecole Normale Superieure, LPT-ENS, Paris, France (August 17 – September 2, 2011)
38. *String Model Building*, Lectures at the First summer school of ITN "Unification at the LHC era", Corfu, Greece (September 7 – 11, 2011)
39. *Touring among orientifold vacua*, workshop on "Fields and strings: theory-cosmology-phenomenology", Corfu, Greece (September – 18, 2011)
40. *A new look at modular integrals in string theory*, String Phenomenology Institute, PH-TH CERN, Geneva, Switzerland (June, 2012)
41. *Progress on one-loop modular integrals in string theory*, XLII Institut d'Eté de l'Ecole Normale Superieure, LPT-ENS, Paris, France (August 20 – 30, 2012)
42. *One loop modular integrals revisited*, String Phenomenology 2013, Hamburg, Germany (July 15 – 19, 2013)
43. *One loop modular integrals revisited*, 3rd Bangkok workshop on high-energy theory, Bangkok, Thailand (January 20 – 24, 2014)
44. *Radiative corrections to string coupling and Eichler integrals*, at "Frontiers in String Phenomenology", Rindberg Castle, Germany (July 28 – August 1, 2014)
45. *Lectures on String Theory*, at "Summer School and Workshop on the Standard Model and Beyond", Corfù, Greece (September 3 – 14, 2014)

46. *Universality of gauge thresholds in non-supersymmetric heterotic vacua*, Frontiers in Field and String Theory, Yerevan, Armenia (September 22 – 26, 2014)
47. *Radiative corrections in non-supersymmetric heterotic string vacua*, at PLANCK 2015, Ioannina, Greece (May 24 – 29, 2015)
48. *Properties of Non-Supersymmetric Strings*, at ``Quantum Fields and Strings 2016'', Corfu, Greece (September 12-17, 2016)
49. *A String Description of N=2* SYM on the Omega Background*, at "Workshop on Geometry and Physics" , Ringberg Castle, Germany (November 20-25, 2016)
50. *Topological amplitudes and the string Omega background*, at "Ninth Crete regional meeting in String Theory", Kolymbari, Crete, Greece (July 9-14, 2017)
51. *Topological amplitudes and the string Omega background*, at "6th International Conference on New Frontiers in Physics", Kolymbari, Crete, Greece (August 27-29, 2017)
52. *Strings on Melvin Spaces and the Omega Background*, at "TFI 2017", Parma, Italy (September 13-15, 2017)
53. *D-branes on Melvin Spaces*, at "HEP 2018 - Recent Developments in High Energy Physics and Cosmology", Athens, Greece (March 28 - April 1, 2018)
54. *Heterotic Thresholds: Universality and the Decompactification Problem*, at "ICNFP2018 - International Conference on New Frontiers in Physics", Kolymbari, Crete, Greece (July, 2018)
55. Strings and Magnetic Fields, at "Supersymmetric Theories, Dualities and Deformations", Bern, Switzerland (16-18 July, 2018)
56. The Geometry Behind Topological Amplitudes, at "Topological String Theory and Related Topics", CERN, Switzerland (3-14 June, 2019)
57. The Geometry Behind Topological Amplitudes, at "Supersymmetry and Quantum Symmetries 2019", Yerevan, Armenia (26-30 August, 2019)
58. The String Geometry Behind Topological Amplitudes, at "Humboldt Kolleg — Frontiers in Physics: from the Electroweak to the Planck scale", Corfu, Greece (10-18 September, 2019)
59. The String Geometry Behind Topological Amplitudes, at "9th Crete Regional Meeting in String Theory", Kolymbari, Greece (16-21 September, 2019)
60. The Omega Background in String Theory and the Topological Amplitudes, at "9th Bangkok Workshop on High Energy Theory", Bangkok, Thailand (20-24 January, 2020)
61. Invited speaker at the "2020 Nankai Symposium on Mathematical Dialogues", at Chern Institute of Mathematics, Tianjin, China (2-13 August, 2021) (Converted to ONLINE conference due to COVID-19 restrictions)
62. Invited speaker at the conference "New Developments in Quantum Gravity and String Theory", Corfu, Greece (11-18 September, 2021)
63. Invited speaker at the conference Strings, Geometry and the Swampland, to held at Ringberg Castel, Germany, November 2021
64. Invited speaker at the conference "Jean-Pierre Fest", to be held in Bern, Switzerland, June 2021 (POSTPONED AT SPRING 2022 DUE TO COVID-19).

LIST OF PUBLICATIONS

1. C. Angelantonj, L. Amendola, M. Litterio and F. Occhionero, *String cosmology and inflation*, Phys. Rev. D51 (1995) 1607, [arXiv:astro-ph/9501008].
2. C. Angelantonj and M. Litterio, *String cosmology*, published on "Birth of the Universe and Fundamental Physics" (Ed. F. Occhionero) (1995).
3. C. Angelantonj, M. Bianchi, G. Pradisi, A. Sagnotti and Ya.S. Stanev, *Chiral asymmetry in four-dimensional open string vacua*, Phys. Lett. B385 (1996) 96, [arXiv:hep-th/9606169].
4. C. Angelantonj, M. Bianchi, G. Pradisi, A. Sagnotti and Ya.S. Stanev, *Comments on Gepner models and type I vacua in string theory*, Phys. Lett. B387 (1996) 743, [arXiv:hep-th/9607229].
5. C. Angelantonj, *Aspects of type I compactifications and type I-heterotic duality*, J. Korean Phys. Soc. 33 (1998) S500, [arXiv:hep-th/9712141].
6. C. Angelantonj, *Type I superstring dynamics in various dimensions*, Ph.D. Thesis, Preprint ROM2F-98/17 (in Italian).
7. C. Angelantonj, *Non-tachyonic open descendants of the 0B string theory*, Phys. Lett. B444 (1998) 309, [arXiv:hep-th/9810214].
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