

# CURRICULUM VITAE

<b>SURNAME AND NAME</b>	<b>TRIGIANTE MARIO</b>
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<b>Nationality</b>	<b>Italian</b>
<b>Birth date</b>	<b>22/11/1970</b>

## Academic Position

Qualification/Title	<b>Full Professor</b>
University	<b>Politecnico di Torino</b>
Department	<b>Applied Science and Technology</b>

**Working experience (please use the following table in order to briefly describe the working positions covered by the candidate)**

Dates	<b>Since 31/12/2018</b>
Name and address of the Employer	<b>Politecnico di Torino</b>
Position held	<b>Full Professor, FIS/02</b>
Main activities/responsibilities	<p><b>I am the leader of the research group on the Theory of Fundamental Interactions at Politecnico di Torino.</b></p> <p><b>Research and teaching activities: The teaching activities started in 2003 and comprise courses in General Physics given on a yearly basis. I also teach a Ph.D. course "Group Theory and Some of its Applications" since 2008;</b></p> <p><b>Since 2018 I have been the coordinator of the Ph.D. Programme on Physics at the DISAT Department of Politecnico di Torino;</b></p> <p><b>Since 2012 I am member of "Collegio di Dottorato";</b></p> <p><b>Since 2010 I have been a representative for Physics of the Didactic Commission of his Department.</b></p>

Dates	<b>From 1/2/2008 to 31/12/2018</b>
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Name and address of the Employer	<b>Politecnico di Torino</b>
Position held	<b>Associate Professorship, FIS/02 (confirmed in 1/2/2011)</b>
Main activities/responsibilities	<p><b>Research and teaching activities. The teaching activities started in 2003 and comprise courses of General Physics given on a yearly basis. I also teach a PhD course "Group Theory and Some of its Applications" since 2008.</b></p> <p><b>From 2012 to 2016 I was member of "Collegio di Ingegneria Elettrica", since 2016 I am member of "Collegio di Ingegneria Chimica e dei Materiali".</b></p> <p><b>From 2013 to 2019 I was member of "Commissione Albi".</b></p> <p><b>Since 2012 I am member of "Collegio di Dottorato".</b></p> <p><b>In 2014 I was member of "Giunta di Dottorato".</b></p> <p><b>Since 2010 I have been a representative for Physics of the Didactic Commission of his Department.</b></p>

Dates	<b>From Nov. 2003 to Dec. 2007</b>
Name and address of the Employer	<b>Politecnico di Torino</b>
Position held	<b>"Professore a Contratto" (Temporary Professorship) within the program named "Rientro dei Cervelli" of the Ministry of Education, University and Research</b>
Main activities/responsibilities	<p><b>Research and teaching activities. The teaching activities comprise courses of General Physics given on a yearly basis.</b></p> <p><b>The research activity from Nov. 2005 to Nov. 2006 was partly funded by the E.U. "M. Curie" grant ERG, contract n. MERG-CT-2005-513622, won by the candidate.</b></p>

Dates	<b>From Nov. 2001 to Nov. 2003</b>
Name and address of the Employer	<b>Spinoza Institute of the Faculty of Physics and Astronomy (University of Utrecht)</b>
Position held	<b>E.U.-Marie Curie Fellow, under Marie Curie contract n. HPMF-CT-2001-01276.</b>
Main activities/responsibilities	<b>Research and teaching activities.</b>

Dates	<b>From Nov. 2000 to Nov. 2001</b>
Name and address of the Employer	<b>Spinoza Institute of the Faculty of Physics and Astronomy (University of Utrecht)</b>

Position held	<b>postdoc</b>
Main activities/responsibilities	<b>Research and teaching activities.</b>

Dates	<b>From Oct. 1997 to Sept. 2000</b>
Name and address of the Employer	<b>University of Wales Swansea</b>
Position held	<b>postdoc</b>
Main activities/responsibilities	<b>Research and teaching activities.</b>

**Education and Training (please use the following table to describe Degrees awarded, by only indicating the information concerning Bachelor's Degree, Master of Science's Degree or/and PhD)**

Date	<b>Oct. 1997</b>
Institution which issued the degree	<b>ISAS-SISSA (Trieste)</b>
Type of Degree awarded (only Bachelor's Degree, Master of Science's Degree, PhD)	<b>PhD Degree in Particle Physics</b>

Date	<b>July 1994</b>
Institution which issued the degree	<b>Università degli Studi di Pisa</b>
Type of Degree awarded (only Bachelor's Degree, Master of Science's Degree, PhD)	<b>Laurea (MS degree) in Physics with full marks and honors (110 cum laude)</b>

## **1. Coordination of research and technology transfer groups and projects.**

- **Coordination and management of research groups, possibly with international relationships and collaborations**

- Since the retirement of Prof. Riccardo D'Auria in 2010, **I am the coordinator of the research group on the Theory of Fundamental Interactions** at Politecnico di Torino [http://www.disat.polito.it/research/research\\_groups/fundint/theory\\_of\\_fundamental\\_interactions](http://www.disat.polito.it/research/research_groups/fundint/theory_of_fundamental_interactions);
- Since 2010 our group has established a solid scientific collaboration with a number of universities in Chile (Pontificia Universidad Catolica de Valparaiso, University Adolfo Ibañez in Viña del Mar, Universidad de Concepción), which was recently extended to CECs center in Valdivia. This collaboration led to a co-tutelle agreement between Politecnico di Torino and some of these Universities for an exchange of PhD students.

Within this co-tutelle program **I supervised three foreign PhD students:**

- Nelson Ruben Merino Moncada who attained the PhD degree in March 2012;
- Patrick Keissy Concha Aguilera who attained the PhD degree in Sept. 2015;
- Marcelo Javier Calderon Ipinza who attained the PhD degree in April 2017.

These PhD degrees were attained in both Politecnico di Torino and Universidad de Concepción (Chile). From Oct. 2017 to Jan. 2018 the PhD student Gustavo Ignacio Rubio González of Universidad de Concepción (Chile) spent a period of Internship ("Dottorato di

Tirocinio”) in my Department under my scientific supervision. His stay was funded by the Chilean foundation CONICYT.

- I have supervised (and co-supervised) the scientific work of three postdocs (L. Sommovigo, E. Orazi and A. Gallerati, whom I am currently supervising), of eight Ph.D. students (which include the three students in co-tutelle mentioned above, two Ph.D. students co-supervised with the University of Turin and three Ph.D. students at Politecnico di Torino), three undergraduate students for their Bachelor theses at Politecnico di Torino and three students of Politecnico di Torino for their Master thesis.
- For the period from 2018 to 2021 he was nominated External Expert for a Ph.D. student at the International Max Planck Research Schools (Munich, Germany);
- I was the **Principal Investigator (“referente scientifico”)** of the project “Linear and non-linear stability in AdS”, Protocol n. 7246/6.1.3, in collaboration with Dott. Andr s Fernando Anabal n Dupuy from University Adolfo Iba nez in Vi na del Mar (Chile). The purpose of the project was to study the stability properties of asymptotically anti-de Sitter solutions to supergravity theories. It was completely funded by the Chilean foundation CONICYT (Comisi n Nacional de Investigaci n Cient fica y Tecnol gica) and was carried out in the DISAT Department of Politecnico di Torino during the period from 1/7/2016 to 31/10/2017;
- I am a **member of the International Advisory Panel of the ARNOLD-REGGE CENTER** for ALGEBRA, GEOMETRY, and THEORETICAL PHYSICS (<http://www.arnoldreggecenter.com/people/structure/>);
- **Principal Investigator** of the project “A geometric approach to quantum gravity” N. 4(15) for which a Senior Grant was funded by CENTRO FERMI (Museo Storico della Fisica e Centro Studi e Ricerche Enrico Fermi), for the period 1/5/2015-1/5/2018, at the DISAT Department of Politecnico di Torino. The aim of the project is to characterize the properties of supergravity vacua through a geometric analysis of the embedding tensor and its duality orbits. After a public selection, the grant was used to employ Dr. Bianca Letizia Cerchiai to work on the project.
- **Principal Investigator** of the project “Modelli Cosmologici e Teorie di Graviti ”, bando 048/2017 for the period from 16/04/2017 to 15/04/2018 at the DISAT Department of Politecnico di Torino. The aim of the project is to study conditions on the embedding tensor under which the corresponding extended supergravity can yield viable cosmological models as consistent truncations. After a public selection Dr. A. Gallerati was designated to work on the project;
- **Principal Investigator** of the project “Modelli Fondamentali per la Cosmologia e la Micrograviti ” funded by FONDAZIONE CRT, bando 062/2016 for the period from 16/04/2016 to 15/04/2017 at the DISAT Department of Politecnico di Torino. The main purpose of the project was to study conditions on the embedding tensor under which the corresponding extended supergravity can yield viable cosmological models as consistent truncations. After a public selection, the funds were used to employ Dr. A. Gallerati to work on the project;
- **I won the E.U. “M. Curie” grant ERG**, contract N. MERG-CT-2005-513622, for the period from Nov. 2005 to Nov. 2006, for a project entitled “Superstring vacua from supergravity”. The aim of the project was to study vacua of superstring theory through its low-energy (gauged) supergravity description. This grant has been used to employ a post-doc (Dr. Luca Sommovigo) at the Physics Department of Politecnico of Turin to collaborate with myself and Prof. R. D’Auria on the project;
- **I won the E.U. fellowship “M. Curie”** for the period from Nov. 2001 to Nov. 2003, contract N. HPMF-CT-2001-01276, which was spent at the Spinoza Institute (Utrecht) on a project entitled “D-Branes in curved spaces: fractional branes and four-dimensional black holes”.

- **Affiliation to Scientific Societies/Associations/Institutes/Projects and Awards**

- I am **member of the International Advisory Panel of the ARNOLD-REGGE CENTER** for ALGEBRA, GEOMETRY and THEORETICAL PHYSICS as mentioned above (<http://www.arnoldreggecenter.com/people/structure/>);
- Since 2011 I have an affiliation with the National Institute for Nuclear Physics (INFN) with the role of "Incarico di Ricerca";
- 2004-2011: I participated in the Italian Networks PRIN 2005, PRIN 2007, PRIN 2009:
  - PRIN 2005, Protocol 2005024045\_005 (24 months)
  - PRIN 2007, Protocol 20075ATT78\_005 (24 months)
  - PRIN 2009, Protocol 2009KHZKRX\_006 (24 months)
- 2000-2003: Affiliation with European Networks RTN, contract N.s HPRN-CT-2000-00131 (in association with University of Utrecht, The Netherlands), MRTN-CT-2004-005104 (in association with Università degli Studi di Torino, Turin, Italy);
- 2005-2006: E.U. "M. Curie" grant ERG, contract N. MERG-CT-2005-513622 (mentioned above);
- 2001-2003: E.U.-Marie Curie Fellow, under Marie Curie contract N. HPMF-CT-2001-01276 (mentioned above);
- 1997-2000: Affiliation with European Network TMR, contract N. ERBFMRX-CT96-0012 in association with the University of Wales Swansea, U.K.;
- 1996-1997: Affiliation with European Network TMR, contract N. ERBFMRX-CT96-0045.

- **Activity as supervisor of bachelor, PhD students and postdocs**

- I was the academic supervisor of postdoc Dr. Luca Sommovigo from 2005 to 2006. He was employed with a "M. Curie" grant ERG that I had won, see above;
- I am the academic supervisor of postdoc A. Gallerati on the project "Modelli Cosmologici e Teorie di Gravità" (bando n. 048/2017, for the period from 16/04/2017 to 15/04/2018 at the DISAT Department of Politecnico di Torino), see above, of which I am the principal investigator;
- I was the academic supervisor of postdoc A. Gallerati on the project "Modelli Fondamentali per la Cosmologia e la Microgravità" funded by FONDAZIONE CRT (bando n. 062/2016, for the period from 16/04/2016 to 15/04/2017 at the DISAT Department of Politecnico di Torino), see above, of which I was the principal investigator;
- I am supervising Dr. B.L. Cerchiai on the project "A geometric approach to quantum gravity" funded by Centro Fermi (bando n. 4(15), for the period 1/5/2015-1/5/2018, at the DISAT Department of Politecnico di Torino), see above, of which I am the principal investigator;
- I am currently supervising the PhD student Dr. Ruggero Noris at Politecnico di Torino on a thesis project on the application of AdS/CFT to the study of graphene;
- I am currently supervising the Ph.D. student Dr. Alfredo Giambrone at Politecnico di Torino on a thesis project on the application of gauged supergravities to the study of S-fold backgrounds;
- 2014-2017: I co-supervised Daniele Ruggeri on his PhD thesis work as a student at Università degli Studi di Torino;
- 2015-2017: I was the PhD supervisor at Politecnico di Torino of Marcelo Javier Calderon Ipinza
- 2013-2015: I was the Ph.D. supervisor at Politecnico di Torino of Patrick Keissy Concha Aguilera;

- 2011-2014: I was the PhD supervisor of Antonio Gallerati. **He won a *Quality Award* for his thesis** on "*Supergravity Solutions*";
- 2008-2011: I co-supervised Riccardo Nicoletti on his PhD thesis work as a student at Università degli Studi di Torino;
- 2010-2012: I was the Ph.D. supervisor at Politecnico di Torino of Nelson Ruben Merino Moncada;
- 2007-2010: I supervised the research work of Emanuele Orazi, PhD student during the first year and postdoc during the last two;
- I supervised the PhD work of Paolo Giaccone at Politecnico di Torino;
- 2010: I supervised the undergraduate student Marco Agnese on his [Bachelor thesis](#). Marco Agnese is currently a PhD student at Imperial College London, UK:

## 2. National and international reputation and professional activity for the scientific community

- **Official research and/or teaching and/or fellowship role assignment, positions as visiting scholar/visiting professor in international highly qualified universities and research centers, awards**
  - 7/11/2005-14/11/2005: I was invited as Visiting Scientist at the University of California Los Angeles, CA, USA;
  - Since the late nineties I was often invited, almost on a yearly basis, as Visiting Scientist at CERN (Geneva, Switzerland) for scientific collaboration;
  - 15/06/2014 - 04/07/2014: I was invited as "Visiting Professor" by Pontificia Universidad Catolica de Valparaiso (PUCV), Chile, to give a 6h PhD course entitled "Black Holes in Supergravity" and for collaboration purposes. I prepared for the occasion lecture notes (123p. in LaTeX) on Supergravity theories and their black hole solutions which were very much appreciated;
  - In January 2014 **I was awarded the Italian National Scientific Qualification for Full Professor Position** ("Abilitazione Scientifica Nazionale di I Fascia") in the Academic Recruitment Field 02/A2 **with a very high rating of both his titles and publications** by the five referees: for the publications I was given three "A" (excellent) and two "B" (very good), while for the titles four "A" and one "B";
  - 2005-2006: I won the E.U. "M. Curie" grant ERG, contract n. MERG-CT-2005-513622 (mentioned above);
  - 2003-2007: I was employed at Politecnico di Torino as "Professore a Contratto" (Temporary Professorship) within the program named "Rientro dei Cervelli" of the Ministry of Education, University and Research (as mentioned above);
  - 2001-2003: E.U.-Marie Curie Fellow, under the Marie Curie contract n. HPMF-CT-2001-01276, at the Spinoza Institute (University of Utrecht) (as mentioned above);
  - 2000-2001: postdoc position, at the Spinoza Institute (University of Utrecht) (as mentioned above);
  - 1997-2000: postdoc position at the University Of Wales Swansea (as mentioned above).

- **Participation in national/international conferences/schools, as a distinguished invited speaker/lecturer**

I was invited to report on my work in various national and international conferences and schools such as Ninth Marcel Grossmann Meeting, Rome, July 2 - 8, 2000, University of Rome "La Sapienza"; the Workshop on "Generalized Geometry and Flux Compactifications", 19/2/2007-1/3/2007, DESY (Hamburg, Germany); STRINGS 2007, 25-29/6/2007 Madrid (Spain), etc., see list below.

1. **Invited speaker at** the international workshop "Supergravity, Strings and Branes", 19-22 June 2023, Feza Gürsey Center for Physics and Mathematics, Istanbul, Turkey. I gave a talk entitled "Webs of Marginally Connected Vacua in Gauged Supergravity";
2. **Invited lecturer at** "12<sup>th</sup> Joburg School on String Theory", 28 Nov.-2 Dec. 2022, Pretoria. There I gave four 2-hour lectures on "Supergravity";
3. **Invited speaker at** SUSY 2021 "The XXVIII International Conference on Supersymmetry and Unification of Fundamental Interactions", Aug. 23-28 2021. I gave a talk entitled "S-Fold Solutions from D=4 Maximal Supergravity";
4. **Invited lecturer at** the School on "Sperstrings and Supergravity", Nov. 19-30 2018, University Adolfo Ibañez, Viña del Mar, Chile. I gave lectures on "Gauged Supergravities";
5. **Invited speaker at** the conference "Holography and Supergravity 2018", Jan 8-12 2018, University Adolfo Ibañez, Viña del Mar, Chile. I gave a talk entitled "Instantons on  $AdS_5 \times S^5 / Z_k$ ";
6. Sept. 2017: On invitation, **I gave remote lectures** on "Supergravity Black Holes" at the "Mesoamerican School on Theoretical Approaches to Black Hole Physics: String and related approaches", September 11 to 16, 2017, Tuxtla Gutiérrez, Chiapas, México (sponsors: ICTP, MMCTP, CONACyT, and UNACH). I was in the Organizing Committee of this school (see below);
7. June 29 2017; **Invited speaker at** the meeting "Pietro Frè: a bridge between Italian and Russian science" in honor of Prof. P. Frè, at Moscow State University Moscow, Russia. I gave a seminar, remote, entitled "The Inspiring Beauty of Symmetry: To My Great Friend and Collaborator Pietro";
8. **Invited speaker at** the workshop "Supergravity What Next", at the Galileo Galilei Institute (GGI) Arcetri 05-09-2016 to 28-10-2016. Title of the talk "Dualities in non-linear theories" ;
9. **Invited speaker at** the workshop "Supergravity 2015", Supergravity 2015 - Padova, October 29-30. Title of the talk "On partial rigid supersymmetry breaking from spontaneously broken supergravity";
10. I have been invited to give a **Plenary Talk** at the conference "Theoretical Frontiers in Black Holes and Cosmology", to be held at the International Institute of Physics (IIP-UFRN), 8-19 of June 2015, Natal, Rio Grande do Norte, Brazil;
11. **Invited lecturer at** the school "Theoretical Frontiers in Black Holes and Cosmology", held at the International Institute of Physics (IIP-UFRN), 8-19 of June 2015, Natal, Rio Grande do Norte, Brazil. I gave lectures on "Gauged Supergravities";
12. **Invited speaker at** the "VII Round Table Italy-Russia@Dubna", November 24 - November 28, 2015, Dubna, Moscow Region, Russia; The title of the talk was "New Physics from maximal Supergravity".
13. I have been invited as a "**Special Invited Guest**" to give a seminar at the conference EU - Russia year of Science "A Window on Physics, Biology and Technology", at the Abdus Salam International Center for Theoretical Physics, 4 - 6 November 2014, Trieste; The title of the talk was "New Physics from maximal Supergravity";
14. I was invited to give a **Plenary Talk** at the XXI st International Conference on Integrable Systems and Quantum symmetries (ISQS-21) Prague, Czech Republic, from June 11 till June 16, 2013; The title of the talk was "On D=4 Stationary Black Holes"
15. I was invited by Prof. Olivera Miskovic of the Pontificia Universidad Católica de Valparaíso (Chile) to give a **Plenary Talk** at the International Meeting "Meeting on the horizon", March 10-14



2014, Valparaiso, Chile. I had to turn down the invitation due to his teaching duties at Politecnico di Torino in that period;

16. **Invited lecturer** at the school LACES 2015, held at the Galileo Galilei Institute for Theoretical Physics, Arcetri-Italy, November 23 - December 11, 2015. I gave a 12 hour PhD course on "Introduction to Supergravity".
17. **Invited speaker** at the conference "Supergravity 2015" - Padova, October 29-30; the title of the talk was "On partial rigid supersymmetry breaking from spontaneously broken supergravity";
18. **Invited lecturer** at the Pontificia Universidad Catolica de Valparaiso (Chile) on 18,19,20/6/2014. I gave 6 hour PhD lectures on "Black Holes in Extended Supergravity" ;
19. **Invited speaker** at the conference "SYMMETRIES OF THE UNIVERSE AND OF THE FUNDAMENTAL INTERACTIONS", Scuola Normale Superiore, Pisa, 16-17 May 2013 ; The title of the talk was "Issues on D=4 Rotating Black Holes";
20. **Invited speaker** at the Round Table FRONTIERS OF MATHEMATICAL PHYSICS , Dubna (Russia) from December 15th to December 19th 2012. The title of the talk was "Gauged Supergravities in Different Frames";
21. **Invited speaker** at Latino-American Workshop on High Energy Physics: Particles and Strings, Havana, Cuba, 15-21 July 2012. The seminar title was: "D = 4 Black Holes From Real Nilpotent Orbits";
22. **Invited speaker** at the International Workshop "Supersymmetries and Quantum Symmetries" (SQS'2011), Bogoliubov Laboratory of Theoretical Physics (JINR, Dubna) 18-23 July 2011. I gave a seminar entitled "D=4 Black Holes from Geodesics";
23. **Invited participant and speaker** in the ESI Program on "Higher Structures in Mathematics and Physics", Vienna, September 1 - November 7, 2010; Title of the talk: "New superstring compactifications from supergravity";
24. **Invited lecturer** on "black holes in supergravity" at the School on Attractor Mechanism (SAM 2009), 29 June - 3 July 2009, Frascati Italy;
25. **Invited speaker** at the PRIN meeting "Symmetries of the Universe and of the Fundamental Interactions ", Scuola Normale Superiore, Pisa, 14-15 Dec. 2007. Title of the talk: "New superstring compactifications from supergravity";
26. **Invited speaker** at STRINGS 2007, 25-29/6/2007 Madrid (Spain). The title of the seminar was "N=2 supergravities from generalized Calabi-Yau compactifications";
27. **Invited speaker** at the International Workshop "Lie Theory and Its Applications in Physics", 18-24 June 2007, Varna, Bulgaria. There I gave a seminar entitled "N = 2 supergravities from generalized Calabi-Yau compactifications."
28. **Invited speaker** to the Workshop on "Generalized Geometry and Flux Compactifications", 19/2/2007-1/3/2007, DESY (Hamburg, Germany), where I gave a seminar entitled Mirror symmetric gauged N = 2 supergravities;
29. **Invited as a moderator** in the Workgroup on "Gauged Supergravity" at the RTN winter school on "Strings, Supergravity and Gauge Theories", 15/1/2007-19/1/2007, CERN (Geneva, Switzerland), where I gave an overview of the recent advances in the field;
30. **Invited speaker** at the workshop of the RTN network "The quantum structure of spacetime and the geometric nature of fundamental interactions ", Kolymbari, Crete, 5-10 Sept., 2004. Title of the talk: "IIB on K3xT2/Z2 orientifold + flux and D3/D7: a supergravity view-point";
31. **Invited speaker** at the RTN Workshop in Leuven, Sept. 13-19, 2002. Title of the talk: "Stable de Sitter solutions in extended supergravities";
32. **Invited speaker** at the RTN Workshop "The Quantum Structure of Spacetime and the Geometric Nature of Fundamental Interactions", Corfu 13-20 September 2001. Title of the talk: "Supersymmetric 3-brane solution on smooth ALE manifolds with flux";
33. **Invited speaker** at the Workshop on the Quantum Structure of Spacetime and the Geometric Nature of Fundamental Interactions (1st Workshop of RTN Network and 34th International Symposium Ahrenschoop on the Theory of Elementary Particle), Berlin, Germany, 4-10 Oct 2000.



Title of the talk: "Microscopic Entropy of the Most General Four Dimensional BPS Black Hole for Type II/M -Theory on Torii";

34. **Invited speaker** at the Fourth Annual European TMR Conference on Integrability, Non-perturbative effects and Symmetry in Quantum Field Theory, Paris, 7-13 September 2000. Title of the talk: "Four-dimensional BPS black holes: Macroscopic and microscopic correspondence";
35. **Invited speaker** at the Ninth Marcel Grossmann Meeting on "recent developments in theoretical and experimental general relativity, gravitation and relativistic field theories", Rome, July 2 - 8, 2000, University of Rome "La Sapienza". Title of the talk: "Regular BPS Black Holes: Pinpointing the Macro-Micro Correspondence";
36. **Invited speaker** at the TMR meeting 20-25 September 1999, SISSA-ISAS, Trieste, Italy. Title of the talk: "Counterterms in Less Than Maximal Supergravities";
37. **Invited speaker** at the TMR Mid-Term Review on "Integrability, Non-Perturbative Effects and Quantum Field Theory", 10-12 December 1998, Mons, Belgium. Title of the talk: "BPS Black Holes in  $N = 8, D = 4$  Supergravity";
38. **Invited speaker** at the SIGRAV (Italian Society of General Relativity) meeting, 20-27 September, Bari (Italy). Title of the seminar "AdS/CFT and Singletons";
39. **Invited speaker** at the "Second Annual European TMR Conference on Integrability, Non-perturbative Effects and Symmetry in Quantum Field Theory", 20 - 27 September 1998, Durham, United Kingdom. Title of the talk "Anti-de Sitter Geometry and Brane Physics";
40. **Invited speaker** at "Cortona 97 : informal meeting on particle physics "; 4-7 June 1997 Villa Olmo, Como (Italy). Title of the talk "U-duality and Solvable Lie Algebras";
41. **Invited speaker** at the work-shop on "Gauge Theories, Applied Supersymmetry and Quantum Gravity" at Imperial College (London, 5-10 July 1996). Title of the talk: "Spontaneous supersymmetry breaking from  $N = 2$  to  $N = 1$ ".

Aside from the above-invited participation in national and international conferences I have been invited to give seminars in various national and **international highly qualified universities and research centers**, such as the University of California Los Angeles (CA, USA), Spinoza Institute (University of Utrecht, The Netherlands), NIKHEF (Amsterdam) etc.

42. **Invited speaker** at the University Roma II on 10/07/2023. The title of the talk was " Webs of Marginally Connected Vacua in Gauged Supergravity ";
43. **Invited speaker** at the University Roma II on 10/2/2020. The title of the talk was "Instantons in  $AdS_5 \times S^5/Z_k$ : Nilpotent Orbits and Holography";
44. **Invited speaker** at the Andrés Bello National University of Santiago (Chile) on 25/6/2014. The title of the talk was "Gauged Supergravities in Different Frames";
45. **Invited speaker** at the University of Amsterdam on 7/2/2014. The title of the talk was "Dual Rotating Black Holes";
46. **Invited speaker** at the University of Milano Bicocca on 31/10/2013. The title of the talk was "Dual Rotating Black Holes";
47. **Invited speaker** at L'Université Libre de Bruxelles, Belgium, in 20/2/2013; The title of the talk was "Gauged Supergravities in Different Frames";
48. **Invited speaker** at the Spinoza Institute in Utrecht on 1/2/2013; The title of the talk was "Gauged Supergravities in Different Frames";
49. **Invited speaker** at Università di Roma Torvergata, on 16/11/2012. The title of the talk was "Gauged Supergravities in Different Frames";
50. **Invited speaker** at the Spinoza Institute in Utrecht on 12/11/2010. Title: "Black Holes and Integrability";
51. **Invited speaker** at the Department of Mathematics of Politecnico of Turin on 16/2/2010. Title of the talk "Black Holes and the Hamilton-Jacobi Equation";
52. **Invited speaker** at SISSA-ISAS, Trieste (Italy) on the 18/6/2008. Title of the talk "New superstring compactifications from supergravity";

53. **Invited speaker** at University of Groningen (The Netherlands) on 20/2/2008. Title of the talk "New superstring compactifications from supergravity";
54. **Invited speaker** at University of Valencia (Spain) on the 11/12/2007. Title of the talk "New superstring compactifications from supergravity";
55. **Invited speaker** at 17th SIGRAV Conference, 4-7 Sep 2006. Turin, Italy. Title of the talk: "Dual Gauged Supergravities";
56. **Invited speaker** at L'Université Libre de Bruxelles, Belgium on the 22/2/2006. Title of the talk "Duality covariant formulation of gauged supergravity";
57. **Invited speaker** at Spinoza Institute in Utrecht, The Netherlands on 2/11/2005. Title of the talk "M-theory compactifications from dual perspectives";
58. **Invited speaker** at University of California Los Angeles, CA, USA in 11/2005. Title of the talk "M-theory compactifications and gauged supergravity,";
59. **Invited speaker** at Ludwig-Maximilians-Universitat, Muenchen, Germany in 4/11/2004. Title of the talk "Compactification with Fluxes: a Supergravity Viewpoint";
60. **Invited speaker** at the University of Torvergata (Rome) on 8/2/2004. Title of the talk "Compactification with fluxes, a supergravity point of view";
61. **Invited speaker** at SISSA-ISAS, Trieste (Italy) on Apr. 30, 2003. Title of the talk: "N = 4 Supergravity Action for Type IIB Superstring on T6/Z2 orientifold with fluxes and D3-branes ";
62. **Invited speaker** at NIKHEF center Amsterdam, The Netherlands on 27 April 2001. Title of the talk: "A macroscopic and microscopic analysis on the most general supersymmetric black hole in four dimensions ";

- **Role and membership in Scientific Committees**

- Sept.-Oct. 2020, I was the chairman of the evaluation committee for the selection of an Associate Professor in Università di Roma "La Sapienza" (the code of the selection procedure is 2019PAE017);
- Jan 31 2020: I was the chairman of the PhD defense committee for the PhD student Matteo Azzola at Università degli Studi di Milano;
- Feb 11 2019: I was a member of the evaluation committee for the call of Dr. Francesco Benini to the role of Associate Professor at SISSA/ISAS, Trieste;
- Jan 26 2018: I was part of the PhD defense committee for the PhD thesis of the students N. Petri and M. Rabbiosi at Università degli Studi di Milano;
- May. 2016: I was invited by Prof. T. Hertog to be a member of the doctoral jury for assessing the thesis of his Ph.D. student Ellen van der Woerd and to participate in her defence which took place on Sept. 2016;
- May. 2013: Invited by Instituto de Fisica Teorica UAM/CSIC-Madrid, as an International Expert, to report on the Ph.D. thesis of Dr. Carlos Shahbazi Alonso;
- Feb. 2012: Member of the PhD defense committee for the PhD thesis of Dr. Daniel Farquet at the Swiss Federal Institute of Technology Lausanne (Lausanne, Switzerland);
- Sept. 2010: Member of the PhD defense committee for the PhD thesis of Dr. Teake Nutma at the University of Groningen (The Netherlands);
- June 2010: Member of the PhD defense committee for the PhD thesis of Dr. A. Le Diffon at the ENS of Lyon (France);
- Sept. 2008; Member of the Ph.D. defence committee for the PhD thesis of Wissam Chemissany at the University of Groningen (The Netherlands);
- Sept. 2007: Member of the PhD defence committee for the PhD thesis of Thomas Van Riet at the University of Groningen (The Netherlands);

- July 2007: Member of the PhD defence committee for the PhD thesis of Jan Rosseel at the Catholic University of Leuven (Belgium);
  - August 2006: Member of the PhD defence committee for the PhD thesis of Geert Smet at the Catholic University of Leuven (Belgium).
- **Organization of national and international conferences, schools and events**
    - **Member of the organizing committee** of the **public event**: Colloquium by Prof. S. Ferrara winner of the 2019 Special Breakthrough Prize in Fundamental Physics with Daniel Z. Freedman and Peter van Nieuwenhuizen, entitled "Supersymmetry, Reflections on the Future of a Symmetry from the Future", 5:30pm, 20/01/2020, aula Consiglio di Facoltà, Politecnico di Torino;
    - **Member of the organizing committee** of the "Mesoamerican School on Theoretical Approaches to Black Hole Physics: String and related approaches", September 11 to 16, 2017, Tuxtla Gutiérrez, Chiapas, México (sponsors: ICTP, MMCTP, CONACyT and UNACH) [<http://mctp.mx/e-black-hole.html>];
    - **On 14 April 2016, I organized in collaboration with Prof. A. Tartaglia** the public event consisting of a seminar by Prof. Gianluca Gemme (representing INFN in the VIRGO Project) entitled "La rivelazione diretta di onde gravitazionali: tecniche sperimentali e implicazioni scientifiche" and public seminars "Che cosa sono le onde gravitazionali previste dalla relatività generale e quali ne sono le sorgenti" by Prof. Tartaglia and "**Relatività generale, onde gravitazionali ed oltre**" by **M. Trigiante**. The event was payed on the research funds of my group;
    - **Part of the organizing committee** for the Workshop "D'Auria Fest" organized at Politecnico di Torino, in the occasion of the 70th birthday of Prof. Riccardo D'Auria, 22-23 April 2010, Turin;
    - **In Jan. 2009 I organized, together with L. Andrianopoli and R. D'Auria, the public event "LHC Colloquium" at Politecnico di Torino** consisting in a main lecture by Prof. Gigi Rolandi (Physics Coordinator of the CMS experiment at CERN, Geneva) on the LHC (Large Hadron Collider) experiment at CERN, followed by public talks by Prof. M. Gallio and Prof. A. Staiano on different experiments in LHC;
    - **I was a convenor** of the parallel session on "Non-Perturbative Field Theory, String Theory, Quantum Groups, and Non-Commutative Geometry" of the 2007 Europhysics Conference on High Energy Physics, 19-25 July 2007, Manchester (England);
    - **Part of the organizing committee** for the third RTN Winter School "The Quantum Structure of Spacetime and the Geometric Nature of Fundamental Interactions", 17-22 January 2002, Utrecht, The Netherlands;
- **Referee of international projects and journals**
    - I have been selected as a **reviewer** for the evaluation of a proposal submitted to the **ERC 'Advanced Grant – 2021'** call and of a proposal submitted to the **ERC 2022 Consolidator Grant call**. The invitation by ERC representatives was motivated by my 'proven expertise and leadership in the field'
    - I was invited on various occasions by the Chilean National Science and Technology Commission (CONICYT - Chile) to review research proposals submitted to the FONDECYT grant as an international expert in the field;

- I was invited by the Research Foundation - Flanders, as an international expert in the field, to review project proposals for a Pegasus Grant;
- I was selected as a referee and refereed projects for the national Italian project "Rita Levi Montalcini" as an international expert in the field;
- I am an Associate Editor for Frontiers;
- I am a reviewer for Physical Review Letters, Physical Review D, JHEP, Nuclear Physics B, Classical and Quantum Gravity, Foundations of Physics, Euro Physics Letters, Journal of Physics A, Mathematical Reviews;
- I was acknowledged by Elsevier as *Most Valued Reviewer* of 2014;

### 3. Teaching activity

- **Formal responsibility of Bachelor's (Laurea) and Master of Science's (Laurea Magistrale) degree courses in Italian and/or foreign universities.**

- **Academic-years 2019-1020, 2020-21, 2021-22,2022-23:** Lecturer ("Docente titolare") of two 2<sup>nd</sup> year courses on Classical Electromagnetism (codes 20AXPMB, 20AXPPI);
- **Academic-year 2017-1018:** Lecturer ("Docente titolare") of a 2<sup>nd</sup> year course on Classical Electromagnetism (code 20AXPMB); Lecturer ("Docente titolare") of a 1<sup>st</sup> year course on Classical Mechanics and Thermodynamics ("Fisica I", code 17AXOLZ).
- **Academic-years 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017,** Lecturer ("Docente titolare") 100 hour, 1<sup>st</sup> year course on Classical Mechanics and Thermodynamics ("Fisica I",code 17AXOLZ). I also taught the exercise sessions. *I prepared lecture notes (more than 200 pages, LaTeX with figures) which are very much appreciated by the students.*

My lectures given during the academic year 2011-2012 were filmed and used by Politecnico di Torino for its students attending the courses in structures owned by Politecnico (Strutture Decentrate di Supporto agli Studenti – SDSS) and located in different towns (Biella, Verrès, Scano di Montiferru, etc. ). During all the academic years starting from 2010, I also taught to the SDSS students and examined them. My videocourse was also made available to all the first year students as a didactic support.

- **Academic-years 2008-2009, 2009-2010,** Lecturer ("Docente titolare") of a course on Classical Mechanics, Thermodynamics and Classical Electromagnetism ("Fisica", code 01AWRDI) of which I also taught the exercise sessions.
- **Academic-year 2007-2008:** Lecturer ("Docente titolare") of two courses on Classical Electromagnetism: Fisica Generale II (for the 3<sup>rd</sup> Faculty "III Facoltà", code 08AXMHK), of which I also taught the exercise and laboratory sessions, and Fisica Sperimentale II (for Automotive Engineering, code 02EMPBK) of which I also taught the exercise sessions.
- **Academic-year 2006-2007:** Lecturer ("Docente titolare") of a course on Classical Electromagnetism: Fisica Generale II (for the 3<sup>rd</sup> Faculty "III Facoltà" , code 08AXMHK), of which I also taught the exercise and laboratory sessions, and two courses, in English, for foreign students. These two courses, "Experimental Physics I and II", codes 01KWWHX and 01KWXHX, respectively, were on Classical Mechanics, Thermodynamics and Classical Electromagnetism, of which I also taught the exercise sessions.

- **Academic-years 2004-2005, 2005-2006:** Lecturer ("Docente titolare") of a course on Classical Electromagnetism: Fisica Generale II (for the 3<sup>rd</sup> Faculty "III Facoltà" , code 07AXMCJ), of which I also taught the exercise sessions.
- **Academic-years 2003-2004:** Lecturer ("Docente titolare") of a course on Classical Electromagnetism: Fisica Generale II (for the 3<sup>rd</sup> Faculty "III Facoltà" , code 03AXM), of which I also taught the exercise sessions.

All these courses have been appreciated by the students, as it can be verified from the results of the "CPD questionnaires".

- **PhD degree courses in Politecnico di Torino**

- **Academic-years 2008-2009, 2009-2010, 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2017-2018, 2019-2020, 2022-2023:** I have been teaching a 20 hour PhD course on "The Theory of Groups and some of its Applications", code 01MLTKG.

I have prepared lecture notes (more than 150 pages, LaTeX with figures) which are very much appreciated by the students. My course has been attended by a colleague of the Mathematics Department (Prof. Letterio Gatto) who has valued it very positively and recommended students of his Department to attend it.

- **Teaching activity in other Institutions:**

- Nov. 2018: I gave lectures on "Gauged Supergravities" School "Sperstrings and Supergravity", Nov. 19-30 2018, University Adolfo Ibañez, Viña del Mar, Chile (as mentioned earlier);
- Sept. 2017: I gave remote lectures on "Supergravity Black Holes" at the "Mesoamerican School on Theoretical Approaches to Black Hole Physics: String and related approaches", September 11 to 16, 2017, Tuxtla Gutiérrez, Chiapas, México (sponsors: ICTP, MMCTP, CONACyT, and UNACH) [<http://mctp.mx/e-black-hole.html>] (as mentioned earlier);
- Invited lecturer at the school LACES 2015, held at the Galileo Galilei Institute for Theoretical Physics, Arcetri-Italy, November 23 - December 11, 2015. I gave a 12 hour PhD course on "Introduction to Supergravity" (as mentioned earlier);
- Invited lecturer at the school "Theoretical Frontiers in Black Holes and Cosmology", held at the International Institute of Physics (IIP-UFRN), 8-19 of June 2015, Natal, Rio Grande do Norte, Brazil. I gave lectures on "Gauged Supergravities" (as mentioned earlier);
- Invited lecturer at the Pontificia Universidad Catolica de Valparaiso (Chile) on 18,19,20/6/2014. I gave 6 hour PhD lectures entitled "Black Holes in Extended Supergravity" (as mentioned earlier);
- He gave a lecture on "black holes in supergravity" at the School on Attractor Mechanism (SAM 2009), 29 June - 3 July 2009, Frascati Italy (as mentioned earlier);
- In November 2006 I taught a 12-hour class on "black holes in general relativity" at the University of Turin, as part of the course on general relativity of Prof. P. Frè;
- As a postdoc at the Spinoza Institute (2000-2003) I assisted Prof. G. 't Hooft (Nobel Prize laureate) in his course "studentenseminarium" on neutrino-oscillations (2001) and for the exercise sessions of his course on String Theory (June 2003).

- **Popularizing science:**

- On 14/4/2017 I gave a talk "Relatività generale, onde gravitazionali ed oltre" for the general public at DISAT Department of Politecnico di Torino within a public event on the discovery of gravitational waves organized by myself and Prof. A. Targaglia (as mentioned above);
- Jan. 2017: I gave, on invitation, a popular science talk on "The Big Bang Theory" at the Istituto Statale "A. Monti", Asti;
- Jan. 2014: I gave, on invitation, a popular science talk on "The Big Bang Theory" at the ISTITUTO COMPRENSIVO STATALE "LEON BATTISTA ALBERTI", Torino;

#### **4. Institutional offices and roles in Italian and foreign Universities**

- Since 2018: I am currently the coordinator of the Ph.D. programme in Physics of the Department DISAT, Politecnico di Torino. I have been confirmed in this role until 2023;
- I am the leader of the research group on the Theory of Fundamental Interactions at Politecnico di Torino.
- Since 2011: Member of the Academic Board for the PhD course in Physics ("Collegio dei Docenti del Dottorato in Fisica"), Department DISAT, Politecnico di Torino;
- In 2014 I was a member of "Giunta di Dottorato" for the PhD course in Physics, Department DISAT, Politecnico di Torino;
- Since 2011: Member of the Panel for the Selection of External Lecturers ("Commissione Albi"), Department DISAT, Politecnico di Torino;
- Since 2010: I am a representative for Physics in the Didactic Commission of the DISAT Department, Politecnico di Torino, Turin. More specifically I have been, and currently, I am responsible for the selection of the lecturers for all the undergraduate courses of Classical Mechanics, Thermodynamics, Classical Electromagnetism and Optics;
- March 2017: I was a member of the PhD defense committee of Fabio Lingua at Politecnico di Torino;
- July 2017: I was a member the PhD defense committee of Jacopo Bindi at Politecnico di Torino;
- As for the institutional roles in other national and foreign Universities, I was invited to be part of Ph.D. defense commissions in various Universities, see "**Role and membership in Scientific Committees**" part of point 3.

### **COMPLETE LIST OF PUBLICATIONS (as of point 1.3)**

#### **i. Publications in peer-reviewed international journals**

1. L. Andrianopoli, B. L. Cerchiai, R. Noris, L. Ravera, M. Trigiante and J. Zanelli, "New torsional deformations of locally AdS3 space," Phys. Rev. D **108** (2023) no.4, 044011;

2. G. Dall'Agata, N. Liatsos, R. Noris and M. Trigiante, "Gauged  $D=4$   $N=4$  Supergravity," accepted for publication on JHEP;
3. U. Bruzzo, P. Frè, U. Shahzad and M. Trigiante, "D3-brane supergravity solutions from Ricci-flat metrics on canonical bundles of Kaehler-Einstein surfaces," *Lett. Math. Phys.* **113** (2023) no.3, 64;
4. A. Anabalón, A. Gallerati, S. Ross and M. Trigiante, "Supersymmetric solitons in gauged  $N = 8$  supergravity," *JHEP* **02** (2023), 055
5. P. Frè, A. Giambrone, D. Ruggeri, M. Trigiante and P. Vasko, "Gauged  $N=3$ ,  $D=4$  supergravity: A new web of marginally connected vacua," *Phys. Rev. D* **106** (2022) no.6, 066012;
6. L. Andrianopoli, C. A. Cremonini, R. D'Auria, P. A. Grassi, R. Matrecano, R. Noris, L. Ravera and M. Trigiante, "M5-brane in the superspace approach," *Phys. Rev. D* **106** (2022) no.2, 026010
7. P. G. Frè and M. Trigiante, "Chaos from Symmetry: Navier Stokes Equations, Beltrami Fields and the Universal Classifying Crystallographic Group," *J. Geom. Phys.* **191** (2023), 104884
8. D. Astesiano, D. Ruggeri, M. Trigiante and T. Van Riet, "Instantons and no wormholes in  $AdS_3 \times S^3 \times CY_2$ ," *Phys. Rev. D* **105** (2022) no.8, 086022;
9. A. Giambrone, A. Guarino, E. Malek, H. Samtleben, C. Sterckx and M. Trigiante, "Holographic evidence for nonsupersymmetric conformal manifolds," *Phys. Rev. D* **105** (2022) no.6, 066018
10. L. Andrianopoli, B. L. Cerchiai, R. Matrecano, R. Noris, L. Ravera and M. Trigiante, "Twisting  $D(2,1; a)$  Superspace," *Fortsch. Phys.* **69** (2021) no.10, 2100111;
11. A. Anabalón, D. Astefanesei, A. Gallerati and M. Trigiante, "Instability of supersymmetric black holes via quantum phase transitions," *JHEP* **11** (2021), 116;
12. A. Giambrone, E. Malek, H. Samtleben, Mario Trigiante, "Global properties of the conformal manifold for S-fold backgrounds ", *JHEP* **2021** (2021) 111;
13. A. Anabalón, D. Astefanesei, A. Gallerati, M. Trigiante, "New non-extremal and BPS hairy black holes in gauged  $N=2$  and  $N=8$  supergravity ", *JHEP* **04** (2021), 047;
14. A. Anabalón, D. Astefanesei, D. Choque, A. Gallerati, M. Trigiante, "Exact holographic RG flows in extended SUGRA" , *JHEP* **04** (2021), 053;
15. A. Guarino, C. Sterckx and M. Trigiante, "N=2 supersymmetric S-folds", *JHEP* **2004** (2020) 050, arXiv:2002.03692 [hep-th];
16. L. Andrianopoli, B. L. Cerchiai, R. Matrecano, O. Miskovic, R. Noris, R. Olea, L. Ravera and M. Trigiante, "N = 2 AdS4 supergravity, holography and Ward identities," *JHEP* **02** (2021), 141;
17. L. Andrianopoli, B. L. Cerchiai, R. D'Auria, A. Gallerati, R. Noris, M. Trigiante and J. Zanelli, "N-extended  $D=4$  supergravity, unconventional SUSY and graphene", *JHEP* **2001** (2020) 084, doi:10.1007/JHEP01(2020)084, arXiv:1910.03508 [hep-th];
18. "The Quantum Theory of Chern-Simons Supergravity", L. Andrianopoli, B. L. Cerchiai, P. A. Grassi and M. Trigiante, *JHEP* **1906** (2019) 036, doi:10.1007/JHEP06(2019)036, arXiv:1903.04431 [hep-th];
19. B. L. Cerchiai, P. Fré, M. Trigiante, "The role of  $PSL(2,7)$  in M-theory: M2-branes, Englert equation and the septuples", *Fortsch. Phys.* **67** (2019) no.5, 1900020, doi:10.1002/prop.201900020, arXiv:1812.11049 [hep-th];
20. S. Katmadas, D. Ruggeri, T. Van Riet, M. Trigiante, "The holographic dual to supergravity instantons in  $AdS_5 \times S^5/Z_k$  ", *JHEP* **10** (2019) 205;
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22. A. Anabalón, D. Astefanesei, A. Gallerati and M. Trigiante, "Hairy Black Holes and Duality in an Extended Supergravity Model", *JHEP* **1804** (2018) 058, doi:10.1007/JHEP04(2018)058, arXiv:1712.06971 [hep-th]
23. D. Ruggeri, M. Trigiante and T. Van Riet, "Instantons from geodesics in AdS moduli spaces", *JHEP* **1803** (2018) 091, doi:10.1007/JHEP03(2018)091, arXiv:1712.06081 [hep-th]
24. T. Hertog, M. Trigiante and T. Van Riet, "Axion Wormholes in AdS Compactifications," *JHEP* **1706** (2017) 067, doi:10.1007/JHEP06(2017)067



25. G. Inverso, H. Samtleben and M. Trigiante, "Type II supergravity origin of dyonic gaugings", *Phys. Rev. D* 95 (2017) no.6, 066020, doi:10.1103/PhysRevD.95.066020;
26. D. Ruggeri and M. Trigiante, "Stationary D=4 Black Holes in Supergravity: The Issue of Real Nilpotent Orbits", *Fortsch. Phys.* 65 (2017) no.5, 1700007, doi:10.1002/prop.201700007
27. M. Trigiante, "Gauged Supergravities", *Phys. Rept.* **680** (2017) 1, doi:10.1016/j.physrep.2017.03.001
28. B. L. Cerchiai and M. Trigiante, "On Multifield Born and Born-Infeld Theories and their non-Abelian Generalizations", *JHEP* 1610 (2016) 160, doi:10.1007/JHEP10(2016)160
29. H. Dietrich, W. A. de Graaf, D. Ruggeri and M. Trigiante, "Nilpotent orbits in real symmetric pairs and stationary black holes", *Fortsch. Phys.* 65 (2017) no.2, 1600118, doi:10.1002/prop.201600118
30. L. Andrianopoli, R. D'Auria, S. Ferrara and M. Trigiante, "c-Map for Born-Infeld theories", *Phys. Lett. B* 758 (2016) 423, doi:10.1016/j.physletb.2016.05.038
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35. A. Gallerati, H. Samtleben and M. Trigiante, "The N>2 supersymmetric AdS vacua in maximal supergravity", *JHEP* 1412 (2014) 174, doi:10.1007/JHEP12(2014)174
36. P. Fré, A. S. Sorin and M. Trigiante, "The  $\mathbb{C}^*$ -map, Tits Satake subalgebras and the search for N=2 inflaton potentials", *Fortsch. Phys.* 63 (2015) 198, doi:10.1002/prop.201500001
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41. S. Ferrara, A. Marrani, E. Orazi and M. Trigiante, "Dualities Near the Horizon", *JHEP* 1311 (2013) 056, doi:10.1007/JHEP11(2013)056
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44. L. Andrianopoli, R. D'Auria, A. Gallerati and M. Trigiante, "Extremal Limits of Rotating Black Holes", *JHEP* 1305 (2013) 071, doi:10.1007/JHEP05(2013)071
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46. G. Dall'Agata, G. Inverso and M. Trigiante, "Evidence for a family of SO(8) gauged supergravity theories", *Phys. Rev. Lett.* 109 (2012) 201301, doi:10.1103/PhysRevLett.109.201301
47. S. Ferrara, A. Marrani, and M. Trigiante, "Super-Ehlers in Any Dimension", *JHEP* 1211 (2012) 068, doi:10.1007/JHEP11(2012)068
48. W. Chemissany, P. Giaccone, D. Ruggeri and M. Trigiante, "Black hole solutions to the F<sub>4</sub>-model and their orbits (I)", *Nucl. Phys. B* 863 (2012) 260, doi:10.1016/j.nuclphysb.2012.05.016

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50. L. Andrianopoli, R. D'Auria, L. Sommovigo and M. Trigiante, "D=4, N=2 Gauged Supergravity coupled to Vector-Tensor Multiplets", Nucl. Phys. B 851 (2011) 1, doi:10.1016/j.nuclphysb.2011.05.007
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52. P. Fre, A. S. Sorin and M. Trigiante, "Integrability of Supergravity Black Holes and New Tensor Classifiers of Regular and Nilpotent Orbits", JHEP 1204 (2012) 015, doi:10.1007/JHEP04(2012)015
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#### iv. Books

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It has been recommended as STANDALONE book on QED for the course "Introduction to Quantum ElectroDynamics" by Dott. Stefano Rigolin at the University of Padova.

#### Bibliometric indices

All data were taken on 06/09/2023. I give below, for the total h-factor and number of citations, the values according to *INSPIRE* database (run by a collaboration of CERN, DESY, Fermilab, IHEP, and SLAC, see <https://inspirehep.net/>) and Google Scholar

- Hirsch factor (h-factor): **39** (INSPIRE), **42** (Google Scholar)
- total number of citations: **4884** (INSPIRE), **5582** (Google Scholar)