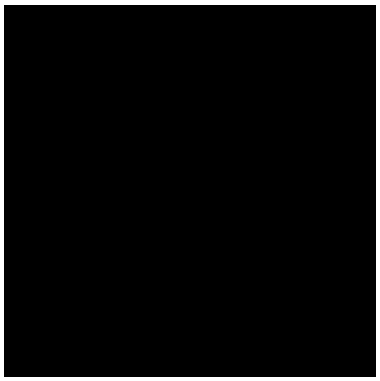
Curriculum Vitae



Family Name *(Cognome)*: Miele

First Name *(Nome)***:** Gennaro

ADDRESSES *(Indirizzi)*

Office *(Ufficio)*: Dipartimento di Fisica "E. Pancini", Università di Napoli "*Federico II"*, Complesso Universitario di Monte S'Angelo,Via Cintia (80126) Napoli, Italia.

E-mail: gennaro.miele@na.infn.it; gennaro.miele@unina.it

AFFILIATION *(Istituzione di appartenenza)*

Dipartimento di Fisica "E. Pancini", Università degli Studi di Napoli "*Federico II*"

ACADEMIC QUALIFICATIONS *(Titoli di studio posseduti)*

- **1986:** Degree in Physics with honour (Laurea quadriennale in Fisica con votazione 110/110 e lode), University of Naples *"Federico II"* (UniNA, Italy)
- **1990:** PhD in Physics, University of Naples *"Federico II"* (UniNA, Italy)

PRESENT POSITION *(Presente posizione lavorativa)*

since Dec. 2016: Full Professor in Theoretical Physics *(Professore Ordinario SSD FIS/02 - FISICA TEORICA MODELLI E METODI MATEMATICI -, Settore concorsuale 02/A2)*, University of Naples *"Federico II"*, Italy

PREVIOUS POSITIONS *(Precedenti posizioni lavorative)*

- **1990 –** Fondazione Della Riccia Fellowship to establish and conduct independent research activity abroad (conducted at UCLA, USA)
- **1990 - 1991**: Post-doctoral fellow, INFN – Italy
- **1991 - 2001**: Assistant Professor *(Ricercatore Universitario)*, University of Naples *"Federico II"* (UniNA, Italy)
- **2001 – 2016** Associate Professor in Theoretical Physics *(Professore Associato SSD FIS/02 - FISICA TEORICA MODELLI E METODI MATEMATICI -, Settore concorsuale 02/A2)*, University of Naples *"Federico II"*, Italy

LANGUAGE SKILLS *(Capacità linguistiche)*

- **Italian**: native language

- **English**: fluent (speaking, reading, writing)
- **Spanish**: fluent (speaking, reading, writing)

RESEARCH ACTIVITY (Attività di Ricerca)

- Theoretical Astroparticle Physics
- Computational Biology and Bioinformatics

SCIENTIFIC OUTPUT AND METRICS *(Produzione scientifica in cifre)*

- **145 publications** in peer reviewed journals (124 about Physics + 21 Computational Biology)
- more than **9200 citations** on published papers in Physics [inSPIRE database, run by CERN, DESY,Fermilab and SLAC]
- average citations per published paper in Physics: **71.5**
H-INDEX: 43 for published paper in Physics [inSPIRE database, run by CERN, DESY,Fermilab and SLAC]

- 3 books as co-author
- 2 books as co-editor
- 44 proceedings and preprints
- 49 seminars delivered

GRANTS as Principal Investigator *(Fondi di ricerca gestiti come responsabile di unità)*

- Responsible of the local unit for the research Project ASI/COFIS. WP2000: COSMOLOGIA DELL' UNIVERSO PRIMORDIALE.
- Responsible of the local unit for the research Project PRIN 2002 founded by MIUR
- Responsible of the local unit for the research Project PRIN 2004 founded by MIUR
- Responsible of the local unit for the research Project PRIN 2006 founded by MIUR
- Up to 2006 Responsible of the local unit for the research INFN Project in Astroparticle Physics (FA51)
- 2007 – 2009 - Responsible of the local unit for the research Project "Azione Integrata Italia/Spagna" – University of Valencia (IFIC) – University of Naples on Neutrino Physics
- Responsible of the local unit for the research Project PRIN 2008 founded by MIUR
- Responsible of the local unit for the research Project PRIN 2012 founded by MIUR

- Responsible of the local unit for the research Project PRIN 2017 founded by MIUR

INVITED VISITING SCIENTIST *(Periodi trascorsi in istituzioni estere)*

- 1991 - JINR (Dubna, Russia)
- 1994 - FNAL (Chicago, USA)
- 1995 - University of Wisconsin (Milwakee, USA)
- 1999 - CERN (Geneva, Switzerland)
- 2007 - 2008 sabbatical year at IFIC (Valencia, Spain) supported by Comunidad Valenciana and CSIC, Spain.
- 2004 - 2010 – short and mid-term visits to Malargue (Mendoza, Argentina) site of the Pierre Auger Observatory
- short visits in the last years at Max Planck Institute (Munich, Germany), IFIC (Valencia, Spain), CINVESTAV (Mexico City, Mexico)**,** JINR (Dubna, Russia).

SCIENTIFIC CHARGES *(Incarichi scientifici e gestionali)*

1. **2000 – 2003 –** Member of the "Giunta di Dipartimento" (Governing Board) of the Physics Dept. University of Naples, Italy
2. **2003 – 2006 –** Member of the "Giunta di Dipartimento" (Governing Board) of the Physics Dept. University of Naples, Italy
3. **2004 – 2007 –** Coordinator of the PhD Programme in Physics of the Physics Dept. University of Naples, Italy
4. **2004 – 2010 –** Member of the Auger International scientific collaboration – Pierre Auger Observatory – Malargue, Mendoza, Argentina
5. **2006 – 2009 –** Member of the "Commissione Scientifica" (Scientific Committee) of the Physics Dept. University of Naples, Italy
6. **2008 – 2012 –** Member of the Faculty Board *(Collegio dei docenti)* of the Doctoral School in "Computational Biology and Bioinformatics"
7. **2013 – 2019 –** Coordinator of the Faculty Board for the Master Degree in Physics *(Coordinatore del Corso di Studi per la Laurea Magistrale in Fisica)*, Physics Dept., University of Naples, Italy
8. **presently –** Member of the Scientific Committee of the International School on AstroParticle Physics (ISAPP).). http://lxmi.mi.infn.it/ISAPP/
9. **presently –** Member of the Faculty Board *(Collegio dei docenti)* of the Doctoral School in "Physics"
10. **presently –** Member of the Faculty Board *(Collegio dei docenti)* of the Doctoral School in "Cosmology, Space Science & Space Technology " of the Scuola Superiore Meridionale
11. **presently –** Member of the "Giunta di Dipartimento" (Governing Board) of the Physics Dept. University of Naples, Italy
12. **presently –** Associate researcher for the Istituto Nazionale di Fisica Nucleare (INFN) – *Incarico di ricerca a tempo indeterminato*
13. **presently –** Deputy Director of the Physics Dept. University of Naples, Italy

14. **presently –** Member of the University Committee for International activities
15. **presently –** Coordinator in Physics for "Allievi Ordinari" of the Scuola Superiore Meridionale

ORGANIZATION OF INTERNATIONAL CONFERENCES

(Organizzazione di eventi internazionali)

1) "Thinking, Observing and Mining The Universe", Sept. 22-27, 2003, Sorrento, Italia
2) "International School on Astro-Particle Physics - European Doctorate School" ISAPP 2006, Sept. 28th - Oct. 5th, 2006, Sorrento, Italia
3) "Neutrino Oscillation Workshop", NOW2006, September 9-16, 2006, Conca Specchiulla (Otranto, Lecce, Italy)
4) "Neutrino Oscillation Workshop", NOW2008, September 6-13, 2008, Conca Specchiulla (Otranto, Lecce, Italy)
5) "Neutrino Oscillation Workshop", NOW2010, September 4-11, 2010, Conca Specchiulla (Otranto, Lecce, Italy)
6) "Neutrino Oscillation Workshop", NOW2012, September 9-16, 2012, Conca Specchiulla (Otranto, Lecce, Italy)
7) "Neutrino Oscillation Workshop", NOW2014, September 7-14, 2014, Conca Specchiulla (Otranto, Lecce, Italy)
8) "Neutrino Oscillation Workshop", NOW2016, September 4-11, 2016, Otranto (Lecce, Italy)
9) "Perspectives in Astroparticle Physics from High Energy Neutrinos" PAHEN2017, Sept. 25-26, 2017, Napoli, Italy
10) "Neutrino Oscillation Workshop", NOW2018, September 9-16, 2018, Rosa Marina (Ostuni, Italy)
11) "Neutrino Oscillation Workshop", NOW2020, September 6-13, 2020, Rosa Marina (Ostuni, Italy)

REFEREE OF RESEARCH PROJECTS AND EVALUATION COMMITTEE FOR THE FOLLOWING INSTITUTIONS *(Valutatore per le seguenti istituzioni)*

1) Miur: PRIN, FIRB (Italy)
2) European INTAS programme (EU)
3) National Center of Science and Technology Evaluation of Kazhakstan Republic
4) ANEP: Plan Est. Excelencia (Spain)
5) Royal Society of New Zealand (Marsden Fund)
6) Agence Nationale de la Recherche (France)
7) Croatian Science Foundation

CAREER SUPERVISION *(Tesi seguite in qualità di relatore o supervisore)*

- 52 master *(Tesi quadriennale o magistrale)* and diploma degree *(Tesi triennale)* students

- 18 PhD students *(Dottorato di ricerca)* (4 ongoing)
- 9 postdoctoral researchers

Supervisor for the following theses in Physics (Q = Tesi quadriennale, T = Tesi triennale (Bachelor), M = tesi magistrale (Master)).The list is starting since 1999.

1. [redacted] (Q 10/2000)
2. [redacted] (Q 07/2002)
3. [redacted] (Q 10/2002)
4. [redacted] (Q 10/2003)
5. [redacted] (Q 06/2003)
6. [redacted] (Q 10/2004)
7. [redacted] (Q 10/2003)
8. [redacted] (Q 10/2004)
9. [redacted] (Q 10/2005)
10. [redacted] (Q 07/2007)
11. [redacted] (Q 02/2009)
12. [redacted] (Q 07/2009)
13. [redacted] (Q 03/2010)
14. [redacted] (Q 07/2010)
15. [redacted] (Q 07/2010)
16. [redacted] (T 10/2011)
17. [redacted] (T 12/2011)
18. [redacted] (T 09/2012)
19. [redacted] (T 11/2012)
20. [redacted] (T 11/2012)
21. [redacted] (T 10/2012)
22. [redacted] (T 10/2012)
23. [redacted] (T 03/2013)
24. [redacted] (M 12/2013)
25. [redacted] (M 10/2014)
26. [redacted] (T 11/2015)
27. [redacted] (T 12/2015)
28. [redacted] (M 07/2016)
29. [redacted] (M 07/2016)
30. [redacted] (T 05/2017)
31. [redacted] (T 12/2017)
32. [redacted] (M 05/2018)
33. [redacted] (T 06/2018)
34. [redacted] (T 06/2018)
35. [redacted] (T 06/2018)
36. [redacted] (T 07/2018)
37. [redacted] (T 12/2018)
38. [redacted] (T 02/2019)
39. [redacted] (T 05/2019)
40. [redacted] (T 05/2019)

41. [redacted] (Q 06/2019)
42. [redacted] (T 07/2019)
43. [redacted] (T 07/2019)
44. [redacted] (T 09/2019)
45. [redacted] (T 11/2019)
46. [redacted] (T 12/2020)
47. [redacted] (M 07/2020)
48. [redacted] (M 07/2020)
49. [redacted]uori (T 03/2021)
50. [redacted] (T 02/2021)

Supervisor for the following PhD theses in Physics

1. "*Nucleosintesi Primordiale: predizioni accurate sulle abbondanze degli elementi leggeri* " by [redacted] (1999)
2. "*Neutrinos in stellar evolution"* by [redacted] (2003)
3. "*Sezioni d'urto di neutrini di alta energia su nucleoni"* by [redacted] (2003)
4. "*Cosmologia non commutativa"* by [redacted] (2003)
5. "*Dark energy in generalized theories of gravity"* by [redacted] (2005)
6. "*High energy astronomy and astrophysics with cosmic rays and gamma particles"* by [redacted] (2006)
7. "*A search for the first star observables"* by [redacted] (2007)
8. "*Radio constraints on dark matter annihilation"* by [redacted] (2008)
9. "*Neutrino oscillations at high densities: Cosmological and astrophysical aspects*" by [redacted] (2011)
10. "*Neutrino Flavor Conversions in High-Density: Astrophysical and Cosmological Environments*" by [redacted] in co-tutorship with University of Hamburg (Prof. [redacted]) (2012)
11. "*Dark Matter indirect detection at Neutrino Telescopes: a multi-messenger approach*" by [redacted] (2017)
12. Thesis in progress by [redacted]
13. Thesis in progress by [redacted]
14. Thesis in progress by [redacted]ese
15. Thesis in R.E. [redacted]

Supervisor for the following Undergraduate theses in Computer Sciences Physics

1. [redacted] (2008)
2. [redacted] (2009)
3. [redacted] (2009)
4. [redacted] (2010)
5. [redacted] (2014)
6. [redacted] (2014)

Supervisor for the following PhD theses in Computational Biology and Bioinformatics

1. *"Complex diseases: a genome-wide assessment of the role of selective pressure on the human genome"* by [redacted] (2011)
2. *"Epigenetic modifications in CpG islands and signatures of selective pressure in human genome"* by [redacted] (2012)
3. *"Transcription Related Genetic Variation in Human Genome"* by [redacted] (2015)

Supervisor for the following Post Doc in Physics

1. [redacted]
2.
3.
4.
5.
6.
7.
8.

Supervisor for the following Post Doc in Computational Biology and Bioinformatics

1. [redacted]

PUBLICATIONS *(Pubblicazioni scientifiche prodotte)*

BOOKS as Author *(Autore delle seguenti Monografie)*

1. ***INTRODUZIONE ALLA FISICA***
   By G. Miele and O. Pisanti (2011)). Published by Edises, ISBN: 9788879596800

2. ***NEUTRINO COSMOLOGY***
   By J. Lesgourgues, G. Mangano, G. Miele, S. Pastor (2012). Published by Cambridge University Press, ISBN: 9781107013957

3. ***ADVANCED CONCEPTS IN QUANTUM MECHANICS***
   By G. Esposito, G. Marmo, G. Miele, G. Sudarshan (2014)). Published by Cambridge University Press, ISBN: 781107076044

BOOKS as Editor *(Editore delle seguenti Monografie)*

1. Proceeding of the International Conference ***QUANTUM GRAVITY AND SPECTRAL GEOMETRY,*** Naples, Italy, 2-6 July 2001. Published in **Nuclear Physics Proceeding Supplements 104 (2002) pp.1-265**

2. Proceedings of the International Conference ***THINKING, OBSERVING AND MINING THE UNIVERSE***, Sorrento, Italy, September 22-27, 2003. Published by World Scientific Publishing Company (February 1, 2004).

LIST OF PUBLICATIONS (peer-reviewed)

The following scientific publications, peer reviewed, are divided according to the field of interest and chronologically listed starting from the most recent ones.

i) Theoretical Astroparticle Physics & High Energy Particle Physics [1 - 117]
ii) Papers within the Pierre Auger Collaboration [118 - 129]
iii) Computational Biology [130 - 151]

1) ***DEEP-SEA DEPLOYMENT OF THE KM3NET NEUTRINO TELESCOPE DETECTION UNITS BY SELF-UNROLLING.***
   By KM3NeT Collaboration***,*** S. Aiello et al.
   Journal of Instrumentation 15 (2020) 11, P11027
   e-Print: **arXiv: 2007.16090 [astro-ph.IM]**
2) ***OBSERVABLE FEATURES IN ULTRAHIGH ENERGY NEUTRINOS DUE TO ACTIVE-STERILE SECRET INTERACTIONS.***
   By Damiano F.G. Fiorillo, Stefano Morisi, Gennaro Miele, Ninetta Saviano
   Physical Review D102 (2020) 8, 083014
   e-Print**: arXiv:2007.07866 [hep-ph]**

3) ***EVENT RECONSTRUCTION FOR KM3NET/ORCA USING CONVOLUTIONAL NEURAL NETWORKS.***
   By KM3NeT Collaboration***,*** S. Aiello et al.
   Journal of Instrumentation 15 (2020) 10, P10005
   e-Print: **arXiv:2004.08254 [astro-ph.IM]**

4) ***gSeaGen: The KM3NeT GENIE-BASED CODE FOR NEUTRINO TELESCOPES.***
   By KM3NeT Collaboration***,*** S. Aiello et al.
   Computer Physics Communications 256 (2020) 107477
   e-Print***:*** **arXiv:2003.14040 [astro-ph.IM]**

5) ***COSMOGENIC NEUTRINO FLUXES UNDER THE EFFECT OF ACTIVE-STERILE SECRET INTERACTIONS.***
   By Damiano F.G. Fiorillo, Gennaro Miele, Stefano Morisi, Ninetta Saviano
   Physical Review D101 (2020) 8, 083024

e-Print**: arXiv:2002.10125 [hep-ph]**

6) ***DECAYING DARK MATTER AT ICECUBE AND ITS SIGNATURE ON HIGH ENERGY GAMMA EXPERIMENTS.***
By Marco Chianese, Damiano F. G. Fiorillo, Gennaro Miele, Stefano Morisi, Ofelia Pisanti
Journal of Cosmology and Astroparticle Physics 1911 (2019) 11, 046
e-Print: **arXiv:1907.11222 [hep-ph]**

7) ***INVESTIGATING TWO HEAVY NEUTRAL LEPTONS NEUTRINO SEESAW MECHANISM AT SHIP.***
By Marco Chianese, Damiano F. G. Fiorillo, Gennaro Miele, Stefano Morisi
International Journal of Modern Physics A34: 1950047,2019
e-Print: **arXiv:1812.01994[hep-ph]**

8) ***NEUTRINOPHILIC DARK MATTER IN THE EPOCH OF ICECUBE AND FERMI-LAT***
By Marco Chianese, Gennaro Miele, Stefano Morisi, Eduardo Peinado
Journal of Cosmology and Astroparticle Physics 1812 (2018) 12, 016
e-Print: **arXiv:1808.02486 [hep-ph]**

9) ***NEUTRINO PHENOMENOLOGY FROM LEPTOGENESIS***
By Franco Buccella, Damiano F.G. Fiorillo, Gennaro Miele, Stefano Morisi, Ofelia Pisanti, Pietro Santorelli
The European Physics Journal C78 (2018) no.10, 817
e-Print: **arXiv:1806.07615 [hep-ph]**

10) ***PARTHENOPE RELOADED***
By R. Consiglio, P.F. de Salas, G. Mangano, G. Miele, S. Pastor, O. Pisanti
Computer Physics Communications 233 (2018) 237-242
e-Print: **arXiv:1712.04378 [astro-ph.CO]**

11) ***INTERPRETING ICECUBE 6-YEAR HESE DATA AS AN EVIDENCE FOR HUNDRED TEV DECAYING DARK MATTER***
By Marco Chianese, Gennaro Miele, Stefano Morisi
Physics Letters B773 (2017) 591-595
e-Print: **arXiv:1707.05241 [hep-ph]**

12) ***USE OF ANTARES AND ICECUBE DATA TO CONSTRAIN A SINGLE POWER-LAW NEUTRINO FLUX***
By Marco Chianese, Rosa Mele, Gennaro Miele, Pasquale Migliozzi, Stefano Morisi
The Astrophysical Journal 851 (2017) no.1, 36
e-Print: **arXiv:1707.05168 [hep-ph] |**

13) ***A NEUTRINO MASS-MIXING SUM RULE FROM SO(10) AND NEUTRINOLESS DOUBLE BETA DECAY***
By Franco Buccella, Marco Chianese, Gianpiero Mangano, Gennaro Miele, Stefano Morisi, Pietro Santorelli
Journal of High Energy Physics 1704 (2017) 004
e-Print**: arXiv:1701.00491 [hep-ph]**

14) ***SPIN, TORSION AND VIOLATION OF NULL ENERGY CONDITION IN TRAVERSABLE WORMHOLES***
By Elisabetta Di Grezia, Emmanuele Battista, Mattia Manfredonia, Gennaro Miele
Eur.Phys.J.Plus 132 (2017) no.12, 537
e-Print**: arXiv:1707.01508 [gr-qc]**

15) ***CHARACTERISING EXOTIC MATTER DRIVING WORMHOLE***
By Marco Chianese, Elisabetta Di Grezia, Mattia Manfredonia, Gennaro Miele
Eur.Phys.J.Plus 132(2017) 164
e-Print**: arXiv:1701.08770 [gr-qc]**

16) ***DARK MATTER INTERPRETATION OF LOW ENERGY ICECUBE MESE EXCESS***
By Marco Chianese, Gennaro Miele, Stefano Morisi
Journal of Cosmology and Astroparticle Physics 1701 (2017) 01, 007
e-Print: **arXiv:1610.04612 [hep-ph]**

17) ***LOW ENERGY ICECUBE DATA AND A POSSIBLE DARK MATTER RELATED EXCESS***
By Marco Chianese, Gennaro Miele, Stefano Morisi, Edoardo Vitagliano
Physics Letters B757 (2016) 251-256
e-Print: **arXiv:1601.02934 [hep-ph]**

18) ***BOUNDS ON VERY LOW REHEATING SCENARIOS AFTER PLANCK***
By P.F. de Salas, M. Lattanzi, G. Mangano, G. Miele, S. Pastor, O. Pisanti
Physical Review D92 (2015) 12, 123534
e-Print**: arXiv:1511.00672 [astro-ph.CO]**

19) ***DECAYING LEPTOPHILIC DARK MATTER AT ICECUBE***
By Sofiane M. Boucenna, Marco Chianese, Gianpiero Mangano, Gennaro Miele, Stefano Morisi, Ofelia Pisanti, Edoardo Vitagliano
Journal of Cosmology and Astroparticle Physics 1512 (2015) 12, 055
e-Print**: arXiv:1507.01000 [hep-ph]**

20) ***CHANCES FOR SUSY-GUT IN THE LHC EPOCH***
By Zurab Berezhiani, Marco Chianese, Gennaro Miele, Stefano Morisi
Journal of High Energy Physics 1508 (2015) 083
e-Print**: arXiv:1505.04950 [hep-ph]** |

21) PROBING NUCLEAR RATES WITH PLANCK AND BICEP2
By Eleonora Di Valentino, Carlo Gustavino, Julien Lesgourgues, Gianpiero Mangano, Alessandro Melchiorri, Gennaro Miele, Ofelia Pisanti
Physical Review D90 (2014) 023543
e-Print: **arXiv:1404.7848 [astro-ph.CO]**

22) THE STRONGEST BOUNDS ON ACTIVE-STERILE NEUTRINO MIXING AFTER PLANCK DATA
By Alessandro Mirizzi, Gianpiero Mangano, Ninetta Saviano, Enrico Borriello, Carlo Giunti, Gennaro Miele, Ofelia Pisanti
Physics Letters B726 (2013) 8-14
e-Print: **arXiv:1303.5368 [astro-ph.CO]**

23) MULTI-MOMENTUM AND MULTI-FLAVOUR ACTIVE-STERILE NEUTRINO OSCILLATIONS IN THE EARLY UNIVERSE: ROLE OF NEUTRINO ASYMMETRIES AND EFFECTS ON NUCLEOSYNTHESIS
By Ninetta Saviano , Alessandro Mirizzi, Ofelia Pisanti, Pasquale Dario Serpico, Gianpiero Mangano, Gennaro Miele
Physical Review D87 (2013) 073006
e-Print: **arXiv:1302.1200 [astro-ph.CO]**

24) UPDATED BBN BOUNDS ON THE COSMOLOGICAL LEPTON ASYMMETRY FOR NON-ZERO θ_{13}
By Gianpiero Mangano, Gennaro Miele , Sergio Pastor, Ofelia Pisanti, Srdjan Sarikas
Physics Letters B708 (2012) 1-5
e-Print: **arXiv:1110.4335 [hep-ph] |**

25) CONSTRAINTS ON STERILE NEUTRINO DARK MATTER FROM XMM--NEWTON OBSERVATION OF M33
By Enrico Borriello, Maurizio Paolillo, Gennaro Miele, Giuseppe Longo, Richard Owen
Monthly Notices of the Royal Astronomical Society 425 (2012) 1628-1632
e-Print: **arXiv:1109.5943 [astro-ph.GA]**

26) CONSTRAINING THE COSMIC RADIATION DENSITY DUE TO LEPTON NUMBER WITH BIG BANG NUCLEOSYNTHESIS
By G. Mangano, G. Miele, S. Pastor, S. Sarikas, O. Pisanti
Journal of Cosmology and Astroparticle Physics 1103 (2011) 035
e-Print: **arXiv:1011.0916 [astro-ph.CO]**

27) RADIO EMISSION FROM DARK MATTER ANNIHILATION IN THE LARGE MAGELLANIC CLOUD
By B.B. Siffert, A. Limone, E. Borriello, .G. Longo, G. Miele,
Monthly Notices of the Royal Astronomical Society 410 (2011) 2463-2471

e-Print: **arXiv:1006.5325** [astro-ph.HE].

28) SEARCHING FOR DARK MATTER IN MESSIER 33
By E. Borriello, G. Longo, G. Miele, M. Paolillo, B.B. Siffert, F.S. Tabatabaei, R. Beck,
The Astrophysical Journal Letters 709:L32-L38,2010
e-Print: **arXiv:0906.2013** [astro-ph.HE]

29) PRIMORDIAL NUCLEOSYNTHESIS: FROM PRECISION COSMOLOGY TO FUNDAMENTAL PHYSICS
By F. Iocco , G. Mangano, G. Miele, O. Pisanti, P.D. Serpico
Physics Reports 472:1-76, 2009
e-Print**: arXiv:0809.0631 [astro-ph]**

30) SENSITIVITY ON EARTH CORE AND MANTLE DENSITIES USING ATMOSPHERIC NEUTRINOS
By E. Borriello G. Mangano, A. Marotta, G. Miele, P. Migliozzi, C.A. Moura, S. Pastor, O. Pisanti, P.E. Strolin,
Journal of Cosmology and Astroparticle Physics 0906:030,2009
e-Print: **arXiv:0904.0796** [astro-ph.EP]

31) SECONDARY RADIATION FROM THE PAMELA/ATIC EXCESS AND RELEVANCE FOR FERMI
By E. Borriello, A. Cuoco, G. Miele,
The Astrophysical Journal Letters 699:L59-L63,2009
e-Print: **arXiv:0903.1852** [astro-ph.GA]

32) NONLOCAL FIELD THEORY DRIVEN BY A DEFORMED PRODUCT: GENERALIZATION OF KALB-RAMOND DUALITY
By E. Di Grezia , G. Esposito, G. Miele. DSF-2008-12, Jun 2008. 23pp.
Int.J.Geom.Meth.Mod.Phys.6:201-218,2009
e-Print: **arXiv:0806.0700** [hep-th]

33) RADIO CONSTRAINTS ON DARK MATTER ANNIHILATION IN THE GALACTIC HALO AND ITS SUBSTRUCTURES
By E. Borriello, A. Cuoco, G. Miele
Physical Review D79:023518,2009
e-Print: **arXiv:0809.2990 [astro-ph]**

34) DISENTANGLING NEUTRINO-NUCLEON CROSS SECTION AND HIGH ENERGY NEUTRINO FLUX WITH A KM^3 NEUTRINO TELESCOPE.
E. Borriello, A. Cuoco, G. Mangano , G. Miele, S. Pastor, O. Pisanti, P.D. Serpico.
Physical Review D77: 045019, 2008
e-Print: **arXiv:0711.0152 [astro-ph]**

35) ***PArthENoPE: PUBLIC ALGORITHM EVALUATING THE NUCLEOSYNTHESIS OF PRIMORDIAL ELEMENTS***
By O. Pisanti, A. Cirillo, S. Esposito, F. Iocco, G. Mangano, G. Miele, P.D. Serpico
Computer Physics Communications 178: 956, 2008
e-Print**: arXiv:0705.0290 [astro-ph]**

36) ***ANGULAR SIGNATURES OF ANNIHILATING DARK MATTER IN THE COSMIC GAMMA-RAY BACKGROUND.***
A. Cuoco, J. Brandbyge, S. Hannestad, T. Haugboelle, G. Miele
Physical Review D77: 123518, 2008
e-Print: **arXiv:0710.4136 [astro-ph]**

37) ***ASTROPHYSICAL INTERPRETATION OF THE MEDIUM SCALE CLUSTERING IN THE ULTRAHIGH ENERGY SKY***
A. Cuoco, G. Miele, P.D. Serpico.
Physics Letters B660: 307-314, 2008
e-Print: **arXiv:0706.2864 [astro-ph]**

38) ***THE SCALAR WAVE EQUATION IN A NON-COMMUTATIVE SPHERICALLY SYMMETRIC SPACE-TIME***
By E.Di Grezia, G. Esposito, G. Miele .
International Journal of Geometric Methods in Modern Physics. 5:33-47,2008
e-Print: **arXiv:0705.0242 [hep-th]**

39) ***THE PATH TO METALLICITY: SYNTHESIS OF CNO ELEMENTS IN STANDARD BBN***
By Fabio Iocco , G. Mangano, G. Miele, O. Pisanti, P.D. Serpico .
Physical Review D75:087304,2007
e-Print: **astro-ph/0702090**

40) ***PRESENT BOUNDS ON THE RELATIVISTIC ENERGY DENSITY IN THE UNIVERSE FROM COSMOLOGICAL OBSERVABLES***
By G. Mangano, A. Melchiorri, O. Mena, G. Miele, A. Slosar
Journal of Cosmology and Astroparticle Physics 0703:006,2007
e-Print: **astro-ph/0612150**

41) ***THE SIGNATURE OF LARGE SCALE STRUCTURES ON THE VERY HIGH ENERGY GAMMA-RAY SKY***
By A. Cuoco, S. Hannestad, T. Haugbolle, G. Miele, P.D. Serpico, H. Tu .
Journal of Cosmology and Astroparticle Physics 0704:013,2007
e-Print: **astro-ph/0612559**

42) ***ULTRAHIGH ENERGY NEUTRINOS IN THE MEDITERRANEAN: DETECTING V(TAU) AND V(MU) WITH A KM**3 TELESCOPE***

By A. Cuoco, G. Mangano, G. Miele , S. Pastor , L. Perrone , O. Pisanti , P.D. Serpico .
Journal of Cosmology and Astroparticle Physics 0702:007,2007
e-Print: **astro-ph/0609241**

43) ***FIRST HINTS OF LARGE SCALE STRUCTURES IN THE ULTRAHIGH ENERGY SKY?***
By A. Cuoco, G. Miele, P. D. Serpico.
Physical Review D74:123008,2006
e-Print: **astro-ph/0610374**

44) ***EFFECTS OF NON-STANDARD NEUTRINO-ELECTRON INTERACTIONS ON RELIC NEUTRINO DECOUPLING***
By G. Mangano, G. Miele , S. Pastor, T. Pinto , O. Pisanti, P. D. Serpico.
Nuclear Physics B756:100-116,2006
e-Print: **astro-ph/0607267**

45) **GRAVITATIONAL AMPLITUDES IN BLACK-HOLE EVAPORATION: THE EFFECT OF N*ON-COMMUTATIVE GEOMETRY***
By E. Di Grezia , G. Esposito, G. Miele,
Classical and Quantum Gravity 23:6425-6434,2006
e-Print: **hep-th/0607157**

46) ***THE FOOTPRINT OF LARGE SCALE COSMIC STRUCTURE ON THE ULTRAHIGH ENERGY COSMIC RAY DISTRIBUTION***
By A. Cuoco, R.D' Abrusco, G. Longo, G. Miele, P.D. Serpico,
Journal of Cosmology and Astroparticle Physics 0601:009,2006
e-Print: **astro-ph/0510765**

47) ***THE APERTURE FOR UHE TAU NEUTRINOS OF THE AUGER FLUORESCENCE DETECTOR USING A DIGITAL ELEVATION MAP.***
By G. Miele, S. Pastor, O. Pisanti,
Physics Letters B634:137-142,2006
e-Print: **astro-ph/0508038**

48) ***DIFFUSE COSMIC NEUTRINO BACKGROUND FROM POPULATION III STARS***
By F. Iocco, G. Mangano, G. Miele, G.G. Raffelt, P.D. Serpico,
Astroparticle Physics 23:303-312,2005
e-Print: **astro-ph/0411545**

49) ***RELIC NEUTRINO DECOUPLING INCLUDING FLAVOR OSCILLATIONS***
By G. Mangano, G. Miele, S. Pastor, T. Pinto, O. Pisanti, P.D. Serpico
Nuclear Physics B729:221-234,2005
e-Print: **hep-ph/0506164**

50) EARTH-SKIMMING UHE TAU NEUTRINOS AT THE FLUORESCENCE DETECTOR OF PIERRE AUGER OBSERVATORY
By C. Aramo, A. Insolia, A. Leonardi, G. Miele, L. Perrone, O. Pisanti, D.V. Semikoz,
Astroparticle Physics 23:65-77,2005
e-Print: **astro-ph/04076**

51) SPACE-TIME SYMMETRY RESTORATION IN COSMOLOGICAL MODELS WITH KALB-RAMOND AND SCALAR FIELDS
By E. Di Grezia, G. Mangano, G. Miele,
Modern Physics Letters A20:605-612,2005
e-Print: **hep-th/0407257**

52) PRESENT STATUS OF PRIMORDIAL NUCLEOSYNTHESIS AFTER WMAP: RESULTS FROM A NEW BBN CODE
By A. Cuoco, F. Iocco, G. Mangano, G. Miele, Ofelia Pisanti, P.D. Serpico
International Journal of Modern Physics A19:4431-4454,2004
e-Print: **astro-ph/0307213**

53) EVOLUTION AND NUCLEOSYNTHESIS OF PRIMORDIAL LOW MASS STARS
By I. Picardi, A. Chieffi, M. Limongi, O. Pisanti, G. Miele, G. Mangano, O. Straniero, G. Imbriani
The Astrophysical Journal 609:1035-1044,2004
e-Print: **astro-ph/0311580**

54) NUCLEAR REACTION NETWORK FOR PRIMORDIAL NUCLEOSYNTHESIS: A DETAILED ANALYSIS OF RATES, UNCERTAINTIES AND LIGHT NUCLEI YIELDS
By P.D. Serpico, S. Esposito, F. Iocco, G. Mangano, G. Miele, O. Pisanti
Journal of Cosmology and Astroparticle Physics 0412:010,2004
e-Print: **astro-ph/0408076**

55) SPACE-TIME NONCOMMUTATIVITY AND ANTISYMMETRIC TENSOR DYNAMICS IN THE EARLY UNIVERSE
By E. Di Grezia, G. Esposito, A. Funel, G. Mangano, G. Miele,
Physical Review D68:105012,2003
e-Print: **gr-qc/0305050**

56) COUPLED QUINTESSENCE AND THE COINCIDENCE PROBLEM
By G. Mangano, G. Miele, V. Pettorino
Modern Physics Letters A18:831-842,2003
e-Print: **astro-ph/0212518**

57) NEUTRINO ENERGY LOSS RATE IN A STELLAR PLASMA
By S. Esposito, G. Mangano, G. Miele, Ilenia Picardi, O. Pisanti,

Nuclear Physics B658:217-253,2003
e-Print: **astro-ph/0301438**

58) RADIATIVE CORRECTIONS TO NEUTRINO ENERGY LOSS RATE IN STELLAR INTERIORS
By S. Esposito, G. Mangano, G. Miele, I. Picardi, O. Pisanti,
Modern Physics Letters A17:491-502,2002
e-Print: **astro-ph/0112384**

59) COSMOLOGICAL PERTURBATIONS AND SHORT DISTANCE PHYSICS FROM NONCOMMUTATIVE GEOMETRY
By F. Lizzi, G. Mangano, G. Miele, M. Peloso
Journal of High Energy Physics 0206:049,2002
e-Print: **hep-th/0203099**

60) A PRECISION CALCULATION OF THE EFFECTIVE NUMBER OF COSMOLOGICAL NEUTRINOS
By G. Mangano, G. Miele, S. Pastor, M. Peloso
Physics Letters B534:8-16,2002
e-Print: **astro-ph/0111408**

61) BOSE-EINSTEIN CONDENSATION AT REHEATING
By G. Mangano, G. Miele, S. Pastor, M. Peloso,
Physical Review D64:123509,2001
e-Print: **hep-ph/0102080**

62) CONSTRAINING NEUTRINO PHYSICS WITH BBN AND CMBR
By S.H. Hansen, G. Mangano, A. Melchiorri, G. Miele, O. Pisanti
Physical Review D65:023511,2001
e-Print: **astro-ph/0105385**

63) EARLY UNIVERSE CONSTRAINTS ON A TIME VARYING FINE STRUCTURE CONSTANT
By P.P. Avelino, S. Esposito, G. Mangano, C.J.A.P. Martins, A. Melchiorri, G. Miele, O. Pisanti, G. Rocha, P.T.P. Viana
Physical Review D64:103505,2001
e-Print: **astro-ph/0102144**

64) TESTING STANDARD AND DEGENERATE BIG BANG NUCLEOSYNTHESIS WITH BOOMERANG AND MAXIMA-1
By S. Esposito, G. Mangano, A. Melchiorri, G. Miele, O. Pisanti
Physical Review D63:043004,2001
e-Print: **astro-ph/0007419**

65) A SEARCH FOR Z-PRIME IN MUON-NEUTRINO ASSOCIATED CHARM PRODUCTION

By P. Migliozzi, G. D'Ambrosio, G. De Lellis, F. Di Capua, G. Miele, P. Santorelli,
Physics Letters B494:19-25,2000
e-Print: **hep-ph/0011051**

66) ANOTHER ALTERNATIVE TO COMPACTIFICATION: NONCOMMUTATIVE GEOMETRY AND RANDALL-SUNDRUM MODELS
By F. Lizzi, G. Mangano, G. Miele
Modern Physics Letters A16:1-8,2001
e-Print: **hep-th/0009180**

67) NONEQUILIBRIUM SPECTRA OF DEGENERATE RELIC NEUTRINOS
S. Esposito, G. Miele, S. Pastor, M. Peloso, O. Pisanti,
Nuclear Physics B590:539-561,2000
e-Print: **astro-ph/0005573**

68) UNSTABLE HEAVY MAJORANA NEUTRINOS AND LEPTOGENESIS
G. Mangano, G. Miele,
Physical Review D62:063514,2000
e-Print: **hep-ph/9912471**

69) BIG BANG NUCLEOSYNTHESIS: AN ACCURATE DETERMINATION OF LIGHT ELEMENT YIELDS
S. Esposito, G. Mangano, G. Miele, O. Pisanti,.
Nuclear Physics B568:421-444,2000
e-Print: **astro-ph/9906232**

70) THE STANDARD AND DEGENERATE PRIMORDIAL NUCLEOSYNTHESIS VERSUS RECENT EXPERIMENTAL DATA
S. Esposito, G. Mangano, G. Miele, O. Pisanti
Journal of High Energy Physics 0009:038,2000
e-Print: **astro-ph/0005571**

71) A DIRECT EVALUATION OF THE Λ^{+}_{C} ABSOLUTE BRANCHING RATIOS: A NEW APPROACH
By CHORUS Collaboration (P. Migliozzi *et al.*).
Physics Letters B462:217-224,1999
e-Print: **hep-ph/9906219**

72) PRECISION RATES FOR NUCLEON WEAK INTERACTIONS IN PRIMORDIAL NUCLEOSYNTHESIS AND HE-4 ABUNDANCE
By S. Esposito, G. Mangano, G. Miele, O. Pisanti
Nuclear Physics B540:3-36,1999
e-Print: **astro-ph/9808196**

73) A VARIATIONAL APPROACH TO SPHERICAL ABERRATIONS IN THE THERMAL WAVE MODEL FOR BEAM DYNAMICS IN CHARGED PARTICLE ACCELERATORS
By D. Anderson, A. Berntson, M. Lisak, M. Quiroga-Teixeiro, G. Zamanakos, R. Fedele, G. Miele
Physica Scripta 58:608-612,1998

74) WAVE FUNCTION RENORMALIZATION AT FINITE TEMPERATURE
S. Esposito, G. Mangano, G. Miele, O. Pisanti
Physical Review D58:105023,1998
e-Print: **hep-ph/9805428**

75) HYBRID INFLATION FROM SUPERSYMMETRIC SU(5)
By L. Covi, G. Mangano, A. Masiero, G. Miele
Physics Letters B424:253-258,1998
e-Print: **hep-ph/9707405**

76) MIRROR FERMIONS IN NONCOMMUTATIVE GEOMETRY
F. Lizzi, G. Mangano, G. Miele, G. Sparano
Modern Physics Letters A13:231-238,1998
e-Print: **hep-th/9704184**

77) THREE FLAVOR MAJORANA NEUTRINOS WITH MAGNETIC MOMENTS IN A SUPERNOVA
By S. Esposito, V. Fiorentino, G. Mangano, G. Miele,
Zeitschrift für Physik C76:479-485,1997
e-Print: hep-ph/9704374

78) FINITE TEMPERATURE EFFECTIVE POTENTIAL FOR GAUGE MODELS IN DE SITTER SPACE
By L. De Nardo, Dmitri V. Fursaev, Gennaro Miele
Classical and Quantum Gravity14:3269-3286,1997
e-Print: **hep-th/9703125**

79) THREE-DIMENSIONAL GROSS-NEVEU MODEL ON CURVED SPACES
By G. Miele, Patrizia Vitale
Nuclear Physics B494:365-387,1997
e-Print: **hep-th/9612168**

80) FERMION HILBERT SPACE AND FERMION DOUBLING IN THE NONCOMMUTATIVE GEOMETRY APPROACH TO GAUGE THEORIES
By F. Lizzi, G. Mangano, G. Miele, G. Sparano
Physical Review D55:6357-6366,1997
e-Print: **hep-th/9610035**

81) HEAT KERNEL COEFFICIENTS AND SPECTRA OF THE VECTOR LAPLACIANS ON SPHERICAL DOMAINS WITH CONICAL SINGULARITIES
By L. De Nardo, D.V. Fursaev, G. Miele,
Classical and Quantum Gravity 14:1059-1078,1997
e-Print: **hep-th/9610011**

82) UNIFIED GAUGE MODELS AND ONE LOOP QUANTUM COSMOLOGY
By G. Esposito, A.Yu. Kamenshchik, G. Miele
Physical Review D56:1328-1331,1997
e-Print: **hep-th/9609178**

83) SUPERNOVA NEUTRINO ENERGY SPECTRA AND THE MSW EFFECT
By F. Buccella, S. Esposito, C. Gualdi, G. Miele
Zeitschrift für Physik C73:633-640,1997
e-Print: **hep-ph/9607226**

84) CONES, SPINS AND HEAT KERNELS
By D.V. Fursaev, G. Miele
Nuclear Physics B484:697-723,1997
e-Print: **hep-th/9605153**

85) QUANTUM STATISTICAL PARTON DISTRIBUTIONS AND THE SPIN CRISIS
By F. Buccella, G. Miele, N. Tancredi
Progress in Theoretical Physics 96:749-770,1996
e-Print: **hep-ph/9604230**

86) CONSTRAINTS ON UNIFIED GAUGE THEORIES FROM NONCOMMUTATIVE GEOMETRY
By F. Lizzi, G. Mangano, G. Miele, G. Sparano
Modern Physics Letters A11:2561-2572,1996
e-Print: **hep-th/9603095**

87) COLEMAN-WEINBERG SO(10) GUT THEORIES AS INFLATIONARY MODELS
By G. Esposito, G. Miele, P. Santorelli
Physical Review D54:1359-1368,1996
e-Print: **gr-qc/9512033**

88) INFLATIONARY COSMOLOGY FROM NONCOMMUTATIVE GEOMETRY
By F. Lizzi, G. Mangano, G. Miele, G. Sparano
International Journal of Modern Physics A11:2907-2930,1996
e-Print: **gr-qc/9503040**

89) FULL PHASE SPACE ANALYSIS OF PARTICLE BEAM TRANSPORT IN THE THERMAL WAVE MODEL
By R. Fedele, F. Galluccio, V.I. Manko, G. Miele
Physics Letters A209:263-276,1995
e-Print: **acc-phys/9510003**

90) NONLEPTONIC WEAK DECAYS OF CHARMED MESONS
By F. Buccella, M. Lusignoli, G. Miele, A. Pugliese, P. Santorelli
Physical Review D51:3478-3486,1995
e-Print: **hep-ph/9411286**

91) QUANTUM STATISTICS AND ALTARELLI-PARISI EVOLUTION EQUATIONS
By G. Mangano, G. Miele, G. Migliore
Nuovo Cimento A108:867-882,1995
e-Print: **hep-ph/9510430**

92) QUANTUM EFFECTS IN FRIEDMANN-ROBERTSON-WALKER COSMOLOGIES
By G. Esposito, G. Miele, L. Rosa, P. Santorelli
Classical and Quantum Gravity 12:2995-3005,1995
e-Print: **gr-qc/9508010**

93) INFLATON POTENTIAL RECONSTRUCTION AND GENERALIZED EQUATIONS OF STATE
By G. Mangano, G. Miele, C. Stornaiolo
Modern Physics Letters A10:1977-1988,1995
e-Print: **astro-ph/9507117**

94) FERMI-DIRAC STATISTICS PLUS LIQUID DESCRIPTION OF QUARK PATRONS
By F. Buccella, G. Miele, G. Migliore, V. Tibullo
Zeitschrift für Physik C68:631-638,1995
e-Print: **hep-ph/9504422**

95) COHERENT STATES FOR PARTICLE BEAMS IN THE THERMAL WAVE MODEL
By S. De Nicola, R. Fedele, V.I. Man'ko, G. Miele
Physica Scripta 52:191-198,1995
e-Print: **hep-th/9503004**

96) SEMICLASSICAL GRAVITATIONAL EFFECTS IN DE SITTER SPACE AT FINITE TEMPERATURE
By D.V. Fursaev, G. Miele
Classical and Quantum Gravity 12:393-402,1995

e-Print: **gr-qc/9404048**

97) NEUTRON STARS AND THE COHERENT NUCLEAR INTERACTION
By E. Del Giudice, C. Gualdi, G. Mangano, R. Mele, G. Miele, G. Preparata
International Journal of Modern Physics D4:531-548,1995

98) RADIATION DAMPING AND QUANTUM EXCITATION FOR LONGITUDINAL CHARGED PARTICLE DYNAMICS IN THE THERMAL WAVE MODEL
By R. Fedele, G. Miele, L. Palumbo
Physics Letters A194:113-118,1994
e-Print: **acc-phys/9510004**

99) ONE LOOP EFFECTIVE POTENTIAL FOR SO(10) GUT THEORIES IN DE SITTER SPACE
By G. Esposito, G. Miele, L. Rosa
Classical and Quantum Gravity 11:2031-2044,1994
e-Print: **gr-qc/9507053**

100) ABERRATIONS IN THE THERMAL WAVE MODEL: COMPARISON WITH PARTICLE TRACKING SIMULATIONS
By R. Fedele, F. Galluccio, G. Miele
Physics Letters A185:93-98,1994

101) FERMI-DIRAC DISTRIBUTIONS FOR QUARK PARTONS
By C. Bourrely, F. Buccella, G. Miele, G. Migliore, J. Soffer, V. Tibullo
Zeitschrift für Physik C62:431-436,1994
e-Print: **hep-ph/9410375**

102) FINITE TEMPERATURE SCALAR FIELD THEORY IN STATIC DE SITTER SPACE
By D.V. Fursaev, G. Miele
Physical Review D49:987-998,1994
e-Print: **hep-th/9302078**

103) COSMOLOGICAL RESTRICTIONS ON CONFORMALLY INVARIANT SU(5) GUT MODELS
By G. Esposito, G. Miele, Luigi Rosa
Classical and Quantum Gravity 10:1285-1298,1993
e-Print: **gr-qc/9506093**

104) THERMAL WAVE MODEL FOR NONLINEAR LONGITUDINAL DYNAMICS IN PARTICLE ACCELERATORS
By R. Fedele, G. Miele, L. Palumbo, V.G. Vaccaro
Physics Letters A179:407-413,1993

105) CP VIOLATING ASYMMETRIES IN CHARGED D MESON DECAYS
By F. Buccella, M. Lusignoli, G. Mangano, G. Miele, A. Pugliese
Physics Letters B302:319-325,1993
e-Print: **hep-ph/9212253**

106) NONLEPTONIC CABIBBO FAVORED B DECAYS AND CP ASYMMETRIES FOR CHARMED FINAL HADRON STATES IN ISGUR AND WISE THEORY
By F. Buccella, F. Lombardi, G. Miele, P. Santorelli
Zeitschrift für Physik C59:437-444,1993
e-Print: **hep-ph/9303210**

107) TWO-BODY NONLEPTONIC DECAYS OF D MESONS
By F. Buccella, M. Lusignoli, G. Miele, A. Pugliese
Zeitschrift für Physik C55:243-250,1992

108) SPONTANEOUSLY BROKEN SU(5) SYMMETRIES AND ONE LOOP EFFECTS IN THE EARLY UNIVERSE
By F. Buccella, G. Esposito, G. Miele
Classical and Quantum Gravity 9:1499-1509,1992
e-Print: gr-qc/9506091

109) SPHERICAL ABERRATIONS IN THE THERMAL WAVE MODEL FOR LUMINOSITY ESTIMATES IN PARTICLE ACCELERATORS
By R. Fedele, G. Miele
Physical Review A46:6634-6639,1992

110) CP VIOLATION IN THE DECAYS OF NEUTRAL B MESONS IN PV
By F. Buccella, G. Mangano, G. Miele, P. Santorelli
Nuovo Cimento A105:33-45,1992

111) ELECTRON BREMSSTRAHLUNG INDUCED BY NEUTRINOS WITH MAGNETIC AND ELECTRIC DIPOLE MOMENTA
By F. Buccella, C. Gualdi, G. Miele, P. Santorelli
Nuovo Cimento B107:1343-1354,1992

112) CP VIOLATION IN THE DECAYS OF NEUTRAL B MESONS
By F. Buccella, G. Mangano, G. Miele
Nuovo Cimento A104:1293-1311,1991

113) A THERMAL WAVE MODEL FOR RELATIVISTIC CHARGED PARTICLE BEAM PROPAGATION
By R. Fedele, G. Miele
Nuovo Cimento D13:1527-1544,1991

114) NONLEPTONIC DECAYS OF CHARMED AND BEAUTIFUL PARTICLES
By F. Buccella, M. Forte, G. Miele, G. Ricciardi
Zeitschrift für Physik C48:47-53,1990

115) AN UPPER LIMIT FOR THE PROTON LIFETIME IN SO(10)
By F. Buccella, G. Miele, L. Rosa, P. Santorelli, T. Tuzi
Physics Letters B233:178-182,1989

116) SHORT RANGE QCD EFFECTS AND FLAVOR SYMMETRY BREAKING IN D AND B EXCLUSIVE NONLEPTONIC DECAYS
By F. Buccella, M. Forte, G. Ricciardi, G. Miele
Nuovo Cimento A102:795-816,1989

117) SO(10) FROM SUPERSYMMETRIC E(6)
By F. Buccella, G. Miele
Physics Letters B189:115-117,1987

---

118) THE FLUORESCENCE DETECTOR OF THE PIERRE AUGER OBSERVATORY
By The Pierre Auger Collaboration (J. Abraham et al.)
Nucl.Instrum.Meth.A620:227-251,2010
e-Print: **arXiv:0907.4282**

119) ATMOSPHERIC EFFECTS ON EXTENSIVE AIR SHOWERS OBSERVED WITH THE SURFACE DETECTOR OF THE PIERRE AUGER OBSERVATORY
By The Pierre Auger Collaboration (J. Abraham et al.)
Astropart.Phys.32:89-99,2009;Erratum-ibid.33:65-67,2010
e-Print: **arXiv:0906.5497** [astro-ph.IM]

120) LIMIT ON THE DIFFUSE FLUX OF ULTRA-HIGH ENERGY TAU NEUTRINOS WITH THE SURFACE DETECTOR OF THE PIERRE AUGER OBSERVATORY
By Pierre Auger Collaboration (J. Abraham *et al.*)
Phys.Rev.D79:102001,2009
e-Print: **arXiv:0903.3385** [astro-ph.HE]

121) UPPER LIMIT ON THE COSMIC-RAY PHOTON FRACTION AT EEV ENERGIES FROM THE PIERRE AUGER OBSERVATORY
By The Pierre Auger Collaboration (J. Abraham *et al.*)
Astropart.Phys.31:399-406,2009
e-Print: **arXiv:0903.1127** [astro-ph.HE]

122) OBSERVATION OF THE SUPPRESSION OF THE FLUX OF COSMIC RAYS ABOVE 4X10^19EV
By Pierre Auger Collaboration (J. Abraham et al.)
Phys.Rev.Lett.101:061101,2008
e-Print: **arXiv:0806.4302** [astro-ph]

123) CORRELATION OF THE HIGHEST-ENERGY COSMIC RAYS WITH THE POSITIONS OF NEARBY ACTIVE GALACTIC NUCLEI
By Pierre Auger Collaboration (J. Abraham *et al.*)
Astroparticle Physics 29: 188-204, 2008
e-Print: **arXiv:0712.2843 [astro-ph]**

124) UPPER LIMIT ON THE DIFFUSE FLUX OF UHE TAU NEUTRINOS FROM THE PIERRE AUGER OBSERVATORY
By The Pierre Auger Collaboration (J. Abraham *et al.*)
Physical Review Letters 100: 211101, 2008
e-Print: **arXiv:0712.1909 [astro-ph]**

125) UPPER LIMIT ON THE COSMIC-RAY PHOTON FLUX ABOVE 10^{19} eV USING THE SURFACE DETECTOR OF THE PIERRE AUGER OBSERVATORY
By Pierre Auger Collaboration (J. Abraham *et al.*)
Astroparticle Physics 29: 243-256, 2008
e-Print: **arXiv:0712.1147 [astro-ph]**

126) CORRELATION OF THE HIGHEST ENERGY COSMIC RAYS WITH NEARBY EXTRAGALACTIC OBJECTS
By Pierre Auger Collaboration (J. Abraham *et al.*)
Science 318: 938-943, 2007
e-Print: **arXiv:0711.2256 [astro-ph]**

127) ANISOTROPY STUDIES AROUND THE GALACTIC CENTRE AT EeV ENERGIES WITH THE AUGER OBSERVATORY.
By Pierre Auger Collaboration (M. Aglietta et al.).
Astroparticle Physics 27:244-253,2007
e-Print: **astro-ph/0607382**

*128) AN UPPER LIMIT TO THE PHOTON FRACTION IN COSMIC RAYS ABOVE 10**19-EV FROM THE PIERRE AUGER OBSERVATORY*
By Pierre Auger Collaboration (J. Abraham et al.)
Astroparticle Physics 27:155-168,2007
e-Print: **astro-ph/0606619**

129) PROPERTIES AND PERFORMANCE OF THE PROTOTYPE INSTRUMENT FOR THE PIERRE AUGER OBSERVATORY

By Pierre Auger Collaboration (J. Abraham et al.)
Nuclear Instruments and Methods in Physics Research A523:50-95,2004

---

130) MODELING DNA METHYLATION PROFILES THROUGH A DYNAMIC EQUILIBRIUM BETWEEN METHYLATION AND DEMETHYLATION.

By G. De Riso, D. F. G. Fiorillo, A. Fierro, M. Cuomo, L. Chiariotti, G. Miele, S. Cocozza.
Biomolecules 10 (2020) p. 1-14

131) NUCLEOTIDE DISTANCE INFLUENCES CO-METHYLATION BETWEEN NEARBY CPG SITES

By O. Affinito, D. Palumbo, A. Fierro, M. Cuomo, G. De Riso, A. Monticelli, G. Miele, L. Chiariotti, S. Cocozza.
Genomics 112 (2020) 144-150

132) TRACKING THE EVOLUTION OF EPIALLELES DURING NEURAL DIFFERENTIATION AND BRAIN DEVELOPMENT: D-ASPARTATE OXIDASE AS A MODEL GENE

By Florio Ermanno, Keller Simona, Coretti Lorena, Affinito Ornella, Scala Giovanni, Errico Francesco, Fico Annalisa, Boscia Francesca, Sisalli Maria Josè, Reccia Mafalda Giovanna, Miele Gennaro, Monticelli Antonella, Scorziello Antonella, Lembo Francesca, Colucci-D'Amato Luca, Minchiotti Gabriella, Avvedimento Vittorio Enrico, Usiello Alessandro, Cocozza Sergio, Chiariotti Lorenzo **(2017) Epigenetics 12, n01**

133) AMPLIMETHPROFILER: A PIPELINE FOR THE ANALYSIS OF CPG METHYLATION PROFILES OF TARGETED DEEP BISULFITE SEQUENCED AMPLICONS

By Giovanni Scala, Ornella Affinito, Domenico Palumbo, Ermanno Florio, Antonella Monticelli, Gennaro Miele, Lorenzo Chiariotti and Sergio Cocozza
BMC Bioinformatics, vol. 17 (2016) p. 484

134) MODELLING DNA METHYLATION BY ANALYZING THE INDIVIDUAL CONFIGURATIONS OF SINGLE MOLECULES

By Ornella Affinito, Giovanni Scala, Domenico Palumbo, Ermano Florio, Antonella Monticelli, Gennaro Miele, Vittorio Enrico Avvedimento, Alessandro Usiello, Lorenzo Chiariotti, Sergio Cocozza **(2016) Epigenetics 11, n12**

135) EVIDENCE FOR EVOLUTIONARY AND NONEVOLUTIONARY FORCES SHAPING THE DISTRIBUTION OF HUMAN GENETIC VARIANTS NEAR TRANSCRIPTION START SITES

By Giovanni Scala , Ornella Affinito, Gennaro Miele, Antonella Monticelli, Sergio Cocozza **(2014) PLoS ONE 9 (12): e114432**

136) A DISTINCT GROUP OF CPG ISLANDS SHOWS DIFFERENTIAL DNA METHYLATION BETWEEN REPLICAS OF THE SAME CELL LINE IN VITRO
By Sergio Cocozza, Giovanni Scala, Gennaro Miele, Imma Castaldo, Antonella Monticelli
BMC Genomics, vol. 14 (2013); p.692

137) CPG ISLANDS UNDER SELECTIVE PRESSURE ARE ENRICHED WITH H3K4ME3, H3K27AC AND H3K36ME3 HISTONE MODIFICATIONS
By Sergio Cocozza, Giovanni Scala, Gennaro Miele, Imma Castaldo and Antonella Monticelli
BMC Evolutionary Biology, vol. 13 (2013); p.145

138) AN IMPROVED COMBINATORIAL BICLUSTERING ALGORITHM
By E. Nosova, F. Napolitano, R. Amato, S. Cocozza, G. Miele, G. Raiconi, R. Tagliaferri
Neural Computing & Applications (2012) p. 1-10, ISSN: 0941-0643

139) SIMULATING GENE-GENE AND GENE-ENVIRONMENT INTERACTIONS IN COMPLEX DISEASES: GENE-ENVIRONMENT INTERACTION SIMULATOR 2
By M. Pinelli, G. Scala, R. Amato, S. Cocozza, G. Miele
BMC Bioinformatics, vol. 13 (2012) p. 132

140) CPG ISLANDS UNDERMETHYLATION IN HUMAN GENOMIC REGIONS UNDER SELECTIVE PRESSURE
By S. Cocozza, M. M. Akhtar, G. Miele, A. Monticelli **(2011)**
PLoS ONE 6 (8) p. e23156

141) SCHIZOPHRENIA AND VITAMIN D RELATED GENES COULD HAVE BEEN SUBJECT TO LATITUDE-DRIVEN ADAPTATION
By R. Amato, M. Pinelli, A. Monticelli, G. Miele, S. Cocozza
BMC Evolutionary Biology, vol. 10 (2010); p.351

142) A NOVEL APPROACH TO SIMULATE GENE-ENVIRONMENT INTERACTIONS IN COMPLEX DISEASES
By R. Amato, M. Pinelli, D. D'andrea, G. Miele, M. Nicodemi, G. Raiconi, S. Cocozza
BMC Bioinformatics, vol. 11 (2010) ; p. 8-1-8-18

143) GENOME-WIDE SCAN FOR SIGNATURES OF HUMAN POPULATION DIFFERENTIATION AND THEIR RELATIONSHIP WITH NATURAL SELECTION, FUNCTIONAL PATHWAYS AND DISEASES
By R. Amato, M. Pinelli, A. Monticelli, D. Marino, G. Miele, S. Cocozza **(2009)**
PLoS ONE, 4 (11): e7927

144) TRANSITIONS AT CPG DINUCLEOTIDES, GEOGRAPHIC CLUSTERING OF TP53 MUTATIONS AND FOOD AVAILABILITY PATTERNS IN COLORECTAL CANCER

By F. Verginelli, F. Bishehsari, F. Napolitano, M. Mahdavinia, A. Cama, R. Malekzadeh,G. Miele, G. Raiconi, R. Tagliaferri, R. Mariani-Costantini **(2009) PLoS ONE, 4(8): e6824**

145) INTERACTIVE DATA ANALYSIS AND CLUSTERING OF GENOMIC DATA

By A. Ciaramella, S. Cocozza, F. Iorio, G. Miele, F. Napolitano, M. Pinelli, G. Raiconi, R. Tagliaferri.
Neural Networks 21,368-378, 2008

146) CLUSTERING AND VISUALIZATION APPROACHES FOR HUMAN CELL CYCLE GENE EXPRESSION DATA ANALYSIS

By F. Napolitano, G. Raiconi, R. Tagliaferri, A. Ciaramella, G. Miele, A. Staiano
International Journal of Approximate Reasoning 47, 70-84, 2008

147) PCA BASED FEATURE SELECTION APPLIED TO THE ANALYSIS OF THE INTERNATIONAL VARIATION IN DIET

By F. Bishehsari, M. Mahdavinia, R. Malekzadeh, R. Mariani-Costantini, G. Miele, F. Napolitano, G. Raiconi, R. Tagliaferri, F. Verginelli
Lecture Notes in Artificial Intelligence 4578, 551-556, 2007

148) CLUSTERING, ASSESSMENT AND VALIDATION: AN APPLICATION TO GENE EXPRESSION DATA

By R. Tagliaferri, A. Ciaramella, S. Cocozza, F. Iorio, F. Napolitano, M. Pinelli, G. Raiconi and G. Miele.
International Joint Conference on Neural Networks (IJCNN 2007) : 1613-1518

149) NEC FOR GENE EXPRESSION ANALYSIS

R. Amato, A. Ciaramella, N. Deniskina, C. Del Mondo, D. di Bernardo, C. Donalek, G. Longo, G. Mangano, G. Miele, G. Raiconi, A. Staiano, R. Tagliaferri
Fuzzy Logic And Applications Lecture Notes In Artificial Intelligence 3849 (2006) 246-251

150) A MULTI-STEP APPROACH TO TIME SERIES ANALYSIS AND GENE EXPRESSION CLUSTERING

By R. Amato, A. Ciaramella, N. Deniskina, C. Del Mondo, D. di Bernardo, C. Donalek, G. Longo, G. Mangano, G. Miele, G. Raiconi, A. Staiano, and R. Tagliaferri
Bioinformatics, 1 March 2006; 22: 589 - 596

151) NOVEL TECHNIQUES FOR MICROARRAY DATA ANALYSIS: PROBABILISTIC PRINCIPAL SURFACES AND COMPETITIVE EVOLUTION ON DATA

By R. Amato, A. Ciaramella, C. Del Mondo, L. De Vinco, C. Donalek, G. Longo, G. Miele, G. Raiconi, A. Staiano, R. Tagliaferri

Journal of Computational and Theoretical Nanoscience, December 2005; 2: 514 - 523