

Curriculum vitae of Prof. Gennaro Miele

Family name: Miele

First name: Gennaro

Date of Birth: 12th January 1963

Town of Birth: Naples, Italy

Addresses

Home: Via G. Jannelli 450, (80131) Napoli (Italy).

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Marital Status: Married with two sons (Matteo and Davide 7 and 5 years old)

Institution: Dipartimento di Scienze Fisiche, Università degli Studi di Napoli "*Federico II*"

Professional Affiliations

February 1990 - July 1991 - Post-Doctoral position of INFN.

July 1991 - October 2001 - Assistant Professor (Ricercatore) at the University of Naples "*Federico II*".

November 2001 – to present - Associate Professor of Theoretical Physics at the University of Naples "*Federico II*"

Higher Education

July 1986 - Laurea in Fisica at the University of Naples "*Federico II*" with the maximum grade (110/110 cum laude), with a thesis entitled: *Super-String inspired phenomenological models*.

October 1990 - Ph.D. in Physics at the University of Naples "*Federico II*", with a thesis entitled: *Nonleptonic decays of charmed and beauty pseudoscalar mesons*.

Languages

Italian: Mother language

English: Fluent

Spanish: Fluent

Computer Skills

Programming languages: Fortran 77 et 90

Symbolic computations: Mathematica

Organizative and Scientific Coordinations

- I am the responsible of the local unit of the national research network about theoretical astroparticle physics, PRIN02, PRIN04, PRIN06 financed by the Italian Minister of Research and Education (MIUR).
- I have been the responsible till 2006 of the local unit in the National Institute of Nuclear Physics (INFN) FA51 special project concerning Astroparticle Physics, and in a cooperation initiative between Italy and Spain.
- I have been the coordinator of the PhD programme (XIX and XX) in Physics of the University of Naples "Federico II".
- I am member of the scientific committee of the Department of Physical Sciences.
- I am evaluator of EU INTAS programme and referee for IOP physics journals.
- I am member of the steering committee of the International School of AstroParticle Physics (ISAPP). <http://lxmi.mi.infn.it/ISAPP/>

Teaching

I have delivered courses in **Quantum Mechanics**, **Quantum Field Theory** and **Astroparticle Physics** for the Physics Diploma (Laurea) and PhD, moreover I deliver courses of **Applied Physics** for the School of Medicine of my university.

Stages

I have been visiting scientists in the following research institutes:

UCLA (Los Angeles, USA), FNAL (Chicago, USA), CERN (Geneva, Switzerland), University of Wisconsin (Milwaukee, USA), IFIC (Valencia, Spain), JINR (Dubna, Russia), Max Planck Institute (Munich, Germany).

Scientific Interests

My research activity mainly concerns Theoretical Physics and its implication for Astrophysics and Astroparticle Physics. In past I have also worked in particle phenomenology; in particular in Non leptonic decays of heavy mesons, deep inelastic scattering and theories beyond the standard model. In the last years our group have studied extensively:

- 1) Big Bang Nucleosynthesis (BBN),
- 2) Cosmic and astrophysics neutrinos
- 3) Ultra High Energy Cosmic Rays

Concerning BBN, as astroparticle research group in Naples we have developed a highly accurate primordial nucleosynthesis code which takes into account a complete updated nuclear reaction chain, the radiative electromagnetic effects in the primordial plasma as well as the involved relic neutrino decoupling phenomenon. Standard BBN predictions result a crucial test for all Big Bang scenarios especially if one reminds that in this case

the only free parameter is the baryonic fraction which can be independently measured *via* the anisotropy of Cosmic Microwave Background.

Neutrino Astronomy, Astrophysics and Cosmology still represent one of the most interesting subject were different aspects of physics strongly combine. In this field we have performed several studies in order to define the property of relic neutrino distribution which strongly effects the determination of cosmological parameters. From the astrophysical point of view we have made more accurate the estimate for the neutrino emission during stellar evolution. This has allowed us to update the corresponding module in the stellar evolution code FRANEC. Moreover we have pointed out for the first time the existence of a neutrino background connected to the POPIII stars collapse. Finally, concerning the neutrino astronomy we have computed the possibility to use the giant arrays for cosmic rays, like Pierre Auger Observatory (PAO), as Neutrino Telescopes.

Ultra High Energy Cosmic Rays (UHECR) represents a new frontier for astronomy since they are almost insensitive to galactic/extragalactic magnetic fields. In this scenario we have computed the possibility to detect large scale structures, as predicted by the knowledge of the nearby universe, at PAO which would represent a first step toward the unveiling of the still unknown sources of UHECR. The analysis has been extended to gamma astronomy were a Dark Matter contribution could also be disentangled.

ADDITIONAL

Main international contacts and collaborations:

- 1) **Prof. G.G. Raffelt** – Max Planck Inst. fur Phys. Werner Heisenberg Inst. fur Phys. Fohringer Ring 6, D-80805 Munich, Germany – raffelt@mppmu.mpg.de
- 2) **Prof. S. Hannestad** – Aarhus Universitet Institut for Fysik og Astronomi (IFA) Ny Munkegade DK-8000 Aarhus C, Denmark – sth@phys.au.dk
- 3) **Dr. S. Pastor Carpi** – *Instituto de Fisica Corpuscular (IFIC) Centro Mixto CSIC-UVEG Edificio Investigacion Paterna Apartado 22085, 46071 Valencia, Spain,* pastor@ific.uv.es
- 4) **Prof. A.D. Dolgov**, – *Dipartimento di Fisica and INFN Sez. di Ferrara, Università degli Studi di Ferrara, I-44100 Ferrara, Italy & Institute of Theoretical and Experimental Physics, 113259, Moscow, Russia* dolgov@fe.infn.it
- 5) **Prof. J.F. Valle** – *Instituto de Fisica Corpuscular (IFIC) Centro Mixto CSIC-UVEG Edificio Investigacion Paterna Apartado 22085, 46071 Valencia, Spain,* valle@ific.uv.es

Recent sabbatical periods

At the moment and till November 2007 I am in sabbatical at IFIC (Valencia, Spain).

Research grants

1. National research networks about theoretical astroparticle physics, PRIN 2002, PRIN 2004, PRIN2006 financed by the Italian Minister of Research and Education (MIUR).
2. National Institute of Nuclear Physics (INFN) special project concerning Astroparticle Physics, FA51, financed every year since 1996
3. Cooperation initiative between Italy and Spain, Azione Integrata Italia-Spagna.
4. Grant ASI/COFIS. WP2000: COSMOLOGIA DELL' UNIVERSO PRIMORDIALE.

List of the most cited papers

1) Properties and performance of the prototype instrument for the Pierre Auger Observatory. By Pierre Auger Collaboration (J. Abraham *et al.*).
Nucl.Instrum.Meth.A523:50-95,2004. Cited 118 times

2) Nonleptonic weak decays of charmed mesons.
By F. Buccella, M. Lusignoli, G. Miele, A. Pugliese
Phys.Rev.D51:3478-3486,1995. Cited 119 times

3) 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
Int.J.Mod.Phys.A19:4431-4454,2004. Cited 74 times

4) Cosmological perturbations and short distance physics from noncommutative geometry. By F. Lizzi, G. Mangano, G. Miele, M. Peloso.
JHEP 0206:049,2002. Cited 85 times

5) Constraining neutrino physics with BBN and CMBR.
By S.H. Hansen, G. Mangano, A. Melchiorri, G. Miele, O. Pisanti
Phys.Rev.D65:023511,2002. Cited 94 times

6) Early universe constraints on a time varying fine structure constant.
P.P. Avelino, S. Esposito, G. Mangano, C.J.A.P. Martins, A. Melchiorri, G. Miele, O. Pisanti, G. Rocha, P.T.P. Viana.
Phys.Rev.D64:103505,2001. Cited 79 times

7) Testing standard and degenerate big bang nucleosynthesis with BOOMERanG and MAXIMA-1.
By S. Esposito, G. Mangano, A. Melchiorri, G. Miele, O. Pisanti.
Phys.Rev.D63:043004,2001. Cited 70 times

8) CP Violating asymmetries in charged D meson decays.
F. Buccella, M. Lusignoli, G. Mangano, G. Miele, A. Pugliese, Pietro Santorelli
Phys.Lett.B302:319-325,1993. Cited 69 times

List of all papers

Peer-reviewed Journals

- 1) ***EVIDENCE FOR NEARBY UNIVERSE STRUCTURES IN THE ULTRA-HIGH ENERGY SKY.***
By A. Cuoco, G. Miele, P.D. Serpico. DSF-20-2007, FERMILAB-PUB-07-212-A, IFIC-07-30, Jun 2007. 8pp.
Submitted for publication to Physics Letters B
e-Print: arXiv:0706.2864 [astro-ph]
- 2) ***A STATISTICAL MECHANICS APPROACH TO REVERSE ENGINEERING: SPARSITY AND BIOLOGICAL PRIORS ON GENE REGULATORY NETWORK***
By M. Pica Ciamarra, G. Miele, L. Milano and M. Nicodemi, G. Raiconi. DSF/21/2007, IFIC-07-31
Submitted for publication to Journal of Computational Biology
e-Print: arXiv:0706.2549v1 [q-bio.MN]
- 3) ***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. DSF-13-07, FERMILAB-PUB-07-079-A, SLAC-PUB-12488, May 2007. 16pp.
Submitted for publication to Computer Physics Communications
e-Print: arXiv:0705.0290 [astro-ph]
- 4) ***THE SCALAR WAVE EQUATION IN A NON-COMMUTATIVE SPHERICALLY SYMMETRIC SPACE-TIME.***
By Elisabetta Di Grezia, Giampiero Esposito, Gennaro Miele . DSF-2007-14, May 2007. 19pp.
Submitted for publication to Classical and Quantum Gravity
e-Print: arXiv:0705.0242 [hep-th]
- 5) ***THE PATH TO METALLICITY: SYNTHESIS OF CNO ELEMENTS IN STANDARD BBN.***
By Fabio Iocco , G. Mangano, G. Miele, O. Pisanti, P.D. Serpico . DSF-03-2007, FERMILAB-PUB-07024-A, SLAC-PUB-12332, Feb 2007. 4pp.
Physical Review D75:087304,2007
e-Print Archive: astro-ph/0702090

- 6) ***CLUSTERING, ASSESSMENT AND VALIDATION: AN APPLICATION TO GENE.***
By Roberto Tagliaferri, Angelo Ciaramella, Sergio Coccozza, Francesco Iorio, Francesco Napolitano, Michele Pinelli, Giancarlo Raiconi and Gennaro Miele.
To be published in the Special Issue of the 2007 International Joint Conference on Neural Networks (IJCNN 2007).
- 7) ***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.
- 8) ***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 .
DSF-36-2006, Dec 2006. 14pp.
Journal of Cosmology and Astroparticle Physics 0704:013,2007.
e-Print Archive: astro-ph/0612559
- 9) ***PRESENT BOUNDS ON THE RELATIVISTIC ENERGY DENSITY IN THE UNIVERSE FROM COSMOLOGICAL OBSERVABLES.***
By G. Mangano, A. Melchiorri, O. Mena, G. Miele, A. Slosar . Dec 2006.
Journal of Cosmology and Astroparticle Physics 0703:006,2007.
e-Print Archive: astro-ph/0612150 .
- 10) ***FIRST HINTS OF LARGE SCALE STRUCTURES IN THE ULTRAHIGH ENERGY SKY?***
By A. Cuoco, G. Miele, P. D. Serpico. FERMILAB-PUB-06-372-A, DSF-33-2006, Oct 2006. 4pp.
Physical Review D74:123008,2006.
e-Print Archive: astro-ph/0610374.
- 11) ***ULTRAHIGH ENERGY NEUTRINOS IN THE MEDITERRANEAN: DETECTING $\nu(\text{TAU})$ AND $\nu(\text{MU})$ WITH A KM^3 TELESCOPE.***
By A. Cuoco, G. Mangano, G. Miele , S. Pastor , L. Perrone , O. Pisanti , P.D. Serpico . DSF-24-2006, IFIC-02-21, MPP-2006-89, Sep 2006. 21pp.
Journal of Cosmology and Astroparticle Physics 0702:007,2007.
e-Print Archive: astro-ph/0609241.

- 12) 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. DSF-23-2006, IFIC-06-24, MPP-2006-80, Jul 2006. 23pp.
Nuclear Physics B756:100-116,2006.
e-Print Archive: astro-ph/0607267.
- 13) GRAVITATIONAL AMPLITUDES IN BLACK-HOLE EVAPORATION: THE EFFECT OF NON-COMMUTATIVE GEOMETRY.**
By E. Di Grezia, G. Esposito, G. Miele, DSF-2006-25, Jul 2006. 13pp.
Classical and Quantum Gravity 23:6425-6434,2006.
e-Print Archive: hep-th/0607157.
- 14) ANISOTROPY STUDIES AROUND THE GALACTIC CENTRE AT EeV ENERGIES WITH THE AUGER OBSERVATORY.**
By Pierre Auger Collaboration (M. Aglietta et al.). FERMILAB-PUB-06-241-A-TD, Jul 2006.
Astroparticle Physics 27:244-253,2007
e-Print Archive: astro-ph/0607382.
- 15) 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.). FERMILAB-PUB-06-210-A, Jun 2006. 29pp.
Astroparticle Physics 27:155-168,2007
e-Print Archive: astro-ph/0606619
- 16) 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.
- 17) 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, DSF-37-2005, Oct 2005. 20pp.
Journal of Cosmology and Astroparticle Physics 0601:009,2006
e-Print Archive: astro-ph/0510765
- 18) THE APERTURE FOR UHE TAU NEUTRINOS OF THE AUGER FLUORESCENCE DETECTOR USING A DIGITAL ELEVATION MAP.**
By G. Miele, S. Pastor, O. Pisanti, DSF-17-2005, IFIC-05-36, Aug 2005. 11pp.
Physics Letters B634:137-142,2006
e-Print Archive: astro-ph/0508038

19) 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.

20) RELIC NEUTRINO DECOUPLING INCLUDING FLAVOR OSCILLATIONS.

By G. Mangano, G. Miele, S. Pastor, T. Pinto, O. Pisanti, P.D. Serpico, DSF-16-2005, IFIC-05-17, MPP-2005-36, Jun 2005. 18pp.

Nuclear Physics B729:221-234,2005

e-Print: hep-ph/0506164

21) DIFFUSE COSMIC NEUTRINO BACKGROUND FROM POPULATION III STARS.

By F. Iocco, G. Mangano, G. Miele, G.G. Raffelt, P.D. Serpico, DSF-26-2004, MPP-2004-121, Nov 2004. 17pp.

Astroparticle Physics 23:303-312,2005

e-Print: astro-ph/0411545

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

By Pierre Auger Collaboration (J. Abraham et al.), FERMILAB-PUB-04-518-A-TD, 2004. 46pp.

Nuclear Instruments and Methods in Physics Research A523:50-95,2004

23) 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, MPP-2004-82, DSP-19-2004, Aug 2004. 78pp.

Journal of Cosmology and Astroparticle Physics 0412:010,2004

e-Print: astro-ph/0408076

24) 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, DSF-23-2004, Jul 2004. 26pp.

Astroparticle Physics 23:65-77,2005

e-Print: astro-ph/0407638

25) SPACE-TIME SYMMETRY RESTORATION IN COSMOLOGICAL MODELS WITH KALB-RAMOND AND SCALAR FIELDS.

By E. Di Grezia, G. Mangano, G. Miele, DSF-12-2004, Jul 2004. 7pp.

Modern Physics Letters A20:605-612,2005

e-Print: hep-th/0407257

26) 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, DSF-39-2003, Nov 2003.

Astrophysical Journal 609:1035-1044,2004

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27) 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, DSF-25-2003, Jul 2003. 29pp.

International Journal of Modern Physics A19:4431-4454,2004

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28) SPACE-TIME NONCOMMUTATIVITY AND ANTISYMMETRIC TENSOR DYNAMICS IN THE EARLY UNIVERSE.

By E. Di Grezia, G. Esposito, A. Funel, G. Mangano, G. Miele, DSF-2003-14, May 2003. 22pp.

Physical Review D68:105012,2003

e-Print: gr-qc/0305050

29) NEUTRINO ENERGY LOSS RATE IN A STELLAR PLASMA.

By S. Esposito, G. Mangano, G. Miele, Ilenia Picardi, O. Pisanti, DSF-21-2002, Jan 2003. 41pp.

Nuclear Physics B658:217-253,2003

e-Print: astro-ph/0301438

30) COUPLED QUINTESSENCE AND THE COINCIDENCE PROBLEM.

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Modern Physics Letters A18:831-842,2003

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31) COSMOLOGICAL PERTURBATIONS AND SHORT DISTANCE PHYSICS FROM NONCOMMUTATIVE GEOMETRY.

By F. Lizzi, G. Mangano, G. Miele, M. Peloso, DSF-06-02, Mar 2002. 18pp.

Journal of High Energy Physics 0206:049,2002

e-Print: hep-th/0203099

32) *RADIATIVE CORRECTIONS TO NEUTRINO ENERGY LOSS RATE IN STELLAR INTERIORS.*

By S. Esposito, G. Mangano, G. Miele, I. Picardi, O. Pisanti, DSF-38-2001, Dec 2001. 13pp.

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33) *A PRECISION CALCULATION OF THE EFFECTIVE NUMBER OF COSMOLOGICAL NEUTRINOS.*

By G. Mangano, G. Miele, S. Pastor, M. Peloso, DSF-37-2001, Nov 2001. 15pp.

Physics Letters B534:8-16,2002

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34) *CONSTRAINING NEUTRINO PHYSICS WITH BBN AND CMBR.*

By S.H. Hansen, G. Mangano, A. Melchiorri, G. Miele, O. Pisanti, DSF-14-2001, May 2001. 6pp.

Physical Review D65:023511,2002

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35) *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, DAMTP-2001-13, DSF-5-2001, Feb 2001. 4pp.

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37) *A SEARCH FOR Z-PRIME IN MUON-NEUTRINO ASSOCIATED CHARM PRODUCTION.*

By P. Migliozi, G. D'Ambrosio, G. De Lellis, F. Di Capua, G. Miele, P. Santorelli, CERN-EP-2000-117, DSF-26-2000, Aug 2000. 13pp.

Physics Letters B494:19-25,2000

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**38) ANOTHER ALTERNATIVE TO COMPACTIFICATION:
NONCOMMUTATIVE GEOMETRY AND RANDALL-SUNDRUM
MODELS.**

By F. Lizzi, G. Mangano, G. Miele, DSF-29-2000, Sep 2000. 7pp.

Modern Physics Letters A16:1-8,2001

e-Print: hep-th/0009180

**39) TESTING STANDARD AND DEGENERATE BIG BANG
NUCLEOSYNTHESIS WITH BOOMERANG AND MAXIMA-1.**

By S. Esposito, G. Mangano, A. Melchiorri, G. Miele, O. Pisanti, DSF-25-2000,
Jul 2000. 4pp.

Physical Review D63:043004,2001

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40) NONEQUILIBRIUM SPECTRA OF DEGENERATE RELIC NEUTRINOS.

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NUCLEOSYNTHESIS VERSUS RECENT EXPERIMENTAL DATA.**

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42) UNSTABLE HEAVY MAJORANA NEUTRINOS AND LEPTOGENESIS.

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Physical Review D62:063514,2000

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**43) BIG BANG NUCLEOSYNTHESIS: AN ACCURATE DETERMINATION
OF LIGHT ELEMENT YIELDS.**

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BRANCHING RATIOS: A NEW APPROACH.**

By CHORUS Collaboration (P. Migliozzi *et al.*). CERN-EP-99-70, DSF-15-99,
May 1999. 12pp.

Physics Letters B462:217-224,1999

e-Print: hep-ph/9906219

45) 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

46) PRECISION RATES FOR NUCLEON WEAK INTERACTIONS IN PRIMORDIAL NUCLEOSYNTHESIS AND HE-4 ABUNDANCE.

By S. Esposito, G. Mangano, G. Miele, O. Pisanti, DSF-30-98, Aug 1998. 50pp.

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e-Print: astro-ph/9808196

47) WAVE FUNCTION RENORMALIZATION AT FINITE TEMPERATURE.

S. Esposito, G. Mangano, G. Miele, O. Pisanti, DSF-14-98, May 1998. 11pp.

Physical Review D58:105023,1998

e-Print: hep-ph/9805428

48) HYBRID INFLATION FROM SUPERSYMMETRIC SU(5).

By L. Covi, G. Mangano, A. Masiero, G. Miele, DSF-35-97, SISSA-95-97-EP, Jul 1997. 11pp.

Physics Letters B424:253-258,1998

e-Print: hep-ph/9707405

49) MIRROR FERMIONS IN NONCOMMUTATIVE GEOMETRY.

F. Lizzi, G. Mangano, G. Miele, G. Sparano, DSF-18-97, OUTP-97-17-P, Apr 1997. 7pp.

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50) THREE FLAVOR MAJORANA NEUTRINOS WITH MAGNETIC MOMENTS IN A SUPERNOVA.

By S. Esposito, V. Fiorentino, G. Mangano, G. Miele, DSF-17-97, Apr 1997. 17pp.

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By L. De Nardo, Dmitri V. Fursaev, Gennaro Miele, ALBERTA-THY-06-97, DSF-T-2-97, Mar 1997. 23pp.

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- 52) ***THREE-DIMENSIONAL GROSS-NEVEU MODEL ON CURVED SPACES.***
By G. Miele, Patrizia Vitale, DSF-52-96, Dec 1996. 25pp.
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e-Print: hep-th/9612168
- 53) ***FERMION HILBERT SPACE AND FERMION DOUBLING IN THE NONCOMMUTATIVE GEOMETRY APPROACH TO GAUGE THEORIES.***
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Known papers (10-49) :	36	36
Less known papers (1-9) :	40	34
Unknown papers (0) :	15	4
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Total eligible papers analyzed:	99	82
Total number of citations:	1620	1605
Average citations per paper:	16	20