

Curriculum Vitæ of Fedele Lizzi

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Personal Information

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Born: 19 October 1956 in Napoli, Italy.

Italian Citizen.

Present Position

Full Professor of Theoretical Physics and Mathematical Models at the University of Napoli *Federico II*.

Synthetic Scientific Curriculum

Undergraduate degree (Laurea) in Naples in December 1979 discussing the thesis *Formalizzazione Geometrico-Differenziale di Alcuni Problemi di Elettromagnetismo* together with G. D’Angelo, advisors G. Marmo e F. Zaccaria. From 1980 to 1985 I have been graduate student, and teaching and research assistant, at Syracuse University (NY) where I earned my Ph.D. discussing the dissertation *The Theory and phenomenology of the Skyrme Model*, A.P. Balachandran supervisor. I have been Research Associate between 1985 and 1989 at the *Rutherford Appleton Laboratory* (Chilton, Oxford), and in the period 1989-1991 at the *International Centre for Theoretical Physics*, Trieste. From 1991 I have had a tenured position at the university of Napoli *Federico II* where I am currently full professor..

My research has been in theoretical physics, usually regarding its more formal aspects, although I have also published more phenomenological papers. Initially as a student I worked on the Skyrme model, and topological solitons, producing important work on the three flavors model and states with higher baryonic number. Later I worked on some aspects of string theory: null string quantization (absence of critical dimension), $N = 2$ superstrings, discretization of Witten string field theory and the Hagedorn transition seen as a nucleation model.

From 1994 I work on various aspects of *Noncommutative Geometry*. I have studied approximations of spaces with nontrivial discrete topologies (noncommutative lattices and fuzzy spaces). Field theory on noncommutative space, with various noncommutative products, and connections with matrix models and fuzzy spaces. I have worked on the Connes approach to the standard model, including its symmetry, cosmological and formal aspects, the spectral action and its connection with renormalization and anomalies. I worked on the connection between string theory and noncommutative geometry, before the explosion of interest due to the paper of Seiberg and Witten (which cites my work). I feel I can say that I am one of the international leading figures in the study of physical applications of noncommutative geometry, as indicated by the invitations to participate and organise international meetings and sit on committees.

Most (but not all) of my papers have been written in collaboration. I have had the fortune to collaborate with more than 50 highly competent and gifted colleagues to date. Of these nearly the majority are younger than I am. In all my collaborations my contribution has been essential.

I currently teach a course on Dynamical Systems, in the past taught undergraduate Quantum Mechanics for many years, and I have also taught Mathematical Methods for Physics, Advanced Quantum Mechanics, Classical Field Theory and Quantum Field Theory. I have also taught several doctoral classes in Napoli and other universities. In addition I have also taught General Physics for the undergraduate degrees in Farmaceutical Chemistry and Informatics. I have been involved at various times in the administration of the Department and the Faculty, and I am presently the Chairman of the Theoretical Physics Section. I have participated (often as Principal Investigator) to several successful competitive grant applications. I have been the national PI of the INFN “Iniziativa Specifica” (National Thematic Research Project) GEOSYMQFT. I am editor of the *International Journal of Modern Physics A* and *Modern Physics Letters A*, and have been referee for several journals, and national and international projects. I have been the advisor of several doctoral and master students.

Previous Employments

- 1989-1991 Research Associate at the International Centre for Theoretical Physics, Trieste.
- 1985-1989 Research Associate at the Rutherford Appleton Laboratory, Didcot, Oxford, UK.
- 1980-1985 Teaching and Research Assistant, Syracuse University.

Long term visits, sabbaticals

- 2017-2018 Visiting Professor at the Departament de Fisica Cuatica y Astrofisica, Universitat de Barcelona from October 2017 to June 2018.
- 2008-2009 Visiting Professor at the Departament de Estructura Components de la Materia, Universitat de Barcelona from October 2009 to June 2010.
- 2002-2003 Sabbatical year spent visiting Heriot Watt University, Edinburgh and the Institute of Mathematical Sciences, Chennai, India.
- 2001 Visiting Scientist at the E. Schrödinger International Institute for Mathematical Physics, Vienna, Austria for the month of September.
- 2001 Visiting Scientist at the Heriot-Watt University (Edinburgh) for the month of August.
- 1996-1997 Sabbatical year spent as Visiting Scientist at the Department of Theoretical Physics, University of Oxford.
- 1997 Visiting Scientist at the Physics Department, University of Sao Paulo, Brazil for the month of June.
- 1996 Visiting Scientist at the Departamento de Matematica, Universidad de Costa Rica (San Jos) for the month November.
- 1995 Visiting Scientist at the E. Schrödinger International Institute for Mathematical Physics, Vienna, Austria for the month of June.
- 1994 Visiting Scientist at the Syracuse University for the months of May-June and October.
- 1983 Visitor at the Indian Institute of Science, Bangalore, India for the fall semester.

Academic Degrees

- 1985 Ph.D. in Theoretical High Energy Physics, Syracuse University. Thesis Advisor: A.P. Balachandran.
- 1982 Master Degree, Syracuse University.
- 1979 Laurea con Lode, Università di Napoli *Federico II*, Advisors: Francesco Zaccaria and Giuseppe Marmo.

Teaching and other didactic activities

Whenever not explicitly stated, teaching activities are at the University of Napoli *Federico II*.

- 2013-Present Lecturer of the class: *Dynamical Systems* for the students of Physics.
- 2013-2021 Lecturer of the class: *Mathematical Methods of Physics* for the students of Physics.
- 2015-2021 Lecturer of the class: *Advanced Topics in Theoretical Physics* for the Ph.D. programme at University of Napoli
- 2014-15 Lecturer of the class: *Noncommutative Geometry* for the Ph.D. programme at University of Napoli.
- 2012-14 Lecturer of the class: *Groups and Quantum Groups* for the Ph.D. programme at University of Napoli.
- 2013-14 Lecturer of the class: *General Physics* for the students of the Informatics Degree.
- 2013 Lecturer of the class: *Acquisition of data* for the students of the Degree of Neurophysiopathology Technician. School of Medicine.
- 2011 Lecturer of the class: *Noncommutative Geometry* for the Ph.D. programme at University of Napoli
- 2010-2012 Lecturer of the class: *Quantum Field Theory*, (First year Master Degree)
- 2010 Lecturer of the class: *Physics*, for the first year undergraduate students in *Chemistry and Pharmaceutical Technologies*.
- 2009 Monographic Course: Noncommutative Geometry Universitat de Barcelona
- 2008 Lecturer of the class: *Noncommutative Geometry* for the Ph.D. programme at University of Napoli

- 2008 Lecturer of the course: *Introduction to Modern Physics* for high school teachers
- 2006 Lecturer of the class: *Noncommutative Geometry* for the Ph.D. programme at University of Napoli Federico II
- 2006-2010 Lecturer of the class: *Quantum Mechanics*, (third year laurea)
- 2005-2008 Lecturer of the class: *Classical Field Theory*, (first year master degree).
- 2004-2006 Lecturer of the class: *Advanced Quantum Mechanics*, (first year master degree).
- 2004 Lecturer of the class: *Quantum Mechanics* for the Ph.D. programme at University of Salerno
- 2003-2004 Lecturer of the class: *Advanced Quantum Mechanics*, (first year master degree).
- 2002 Lecturer of the class: *Noncommutative Geometry* for the Ph.D. programme at University of Napoli Federico II and Heriot-Watt University, Edinburgh.
- 2001-2002 Lecturer of the class of *Istituzioni di Fisica Teorica (Quantum Mechanics)* fourth year laurea.
- 1999-2001 Lecturer of the class of *Istituzioni di Fisica Teorica (Quantum Mechanics)* fourth year laurea.
- 1998-1999 Lecturer of the class *Fisica teorica (Theoretical Physics)* (modulo A).
- 1998-1999 Lecturer of the problem solving class of *Istituzioni di Fisica Teorica (Quantum Mechanics)*.
- 1997-1998 Lecturer of the *problem solving class of Metodi Matematici della Fisica (Mathematical methods of Physics)*.
- 1996 Speaker at “Colloqui di Fisica Moderna, Cicli Monografici di Aggiornamento per i Docenti delle Scuole Medie Superiori” (Colloquia on modern physics, Monographic lectures for teachers of High School) organized by the University of Napoli, with the lecture: *Simmetrie dello Spazio Tempo (Symmetries of space and time)*.
- 1995-present Speaker in various high schools of the greater Naples area with the seminar *Geografia del Tempo, Introduzione alla Relatività Ristretta (Geography of time, an introduction to special relativity)*, for high school students.
- 1995-1996 Lecturer of the *problem solving class of Metodi Matematici della Fisica (Mathematical methods of Physics)*.
- 1994-1995 Lecturer of the *problem solving class of the class of Fisica Generale I (General Physics)* for the students of mathematics.

- 1991-1994 Lecturer of the problem solving class of *Istituzioni di Fisica Teorica (Quantum Mechanics)*.
- 1987 Tutor at the 17th BUSSTPP (*British Universities Summer School in Theoretical Particle Physics*). Summer School for British first year graduate students.
- 1980-1985 Research and Teaching Assistant, Syracuse University. Recitation assistant for the classes of *General Physics, Physics for nonscience Major, Astronomy, laboratory of Physics*. In charge of the summer course of *Astronomy*.

Main Grants Awarded on a Competitive Basis

Coordinator

- 2013-2019 National Chairman (responsabile nazionale) of the INFN *Iniziativa Specifica* (National Project): *GeoSymQFT, Geometry and Symmetry of Quantum Field Theory*, The project has been classified as "Excellent" by the external referees and funded on a rolling grant of approximately 55 K€/year.
- 2015-2019 Member of the Core Group and Management Committee of the *Cost Action: Quantum structure of spacetime (QSPACE)* Founded for approximately 200K€/year.
- 2013-2014 Programme *Messaggeri della Conoscenza, (Knowledge Messengers)*, exchange programme of researchers and students funded for 33.6 K€.
- 2005-2006 Local Coordinator Grant *PRIN* (Progetto di Ricerca di Interesse Nazionale): *SINTESE* (Singolarità, Integrabilità, Simmetrie) funded for 50 K€.
- 2003-2004 Local Coordinator Grant *PRIN* (Progetto di Ricerca di Interesse Nazionale): *SINTESE* (Singolarità, Integrabilità, Simmetrie) funded for 60 K€.
- 2000-2002 Local Coordinator Grant *PRIN* (Progetto di Ricerca di Interesse Nazionale): *SINTESE* (Singolarità, Integrabilità, Simmetrie) funded for 66 K€.

Participant

- 2014-2016 *Programma STAR 2013*, funded by UniNA and Compagnia di San Paolo for 84.5 K€, coordinator Francesco D'Andrea.
- 2013-2014 Bilateral exchange programme: Italy-Serbia. Coordinators Leonardo Castellani-Marija Dimitrievic.

- 2012-2013 Bilateral exchange programme: INFN-MCINN (Napoli-Barcelona) (Spain).
Coordinators Giancarlo D'Ambrosio-Domenec Espriu.
- 2009-present CUR Generalitat de Catalunya under projects 2009SGR502, FPA2010-20807,
Responsible Domenec Espriu.
- 2001-2013 INFN *Iniziativa Specifica* (National Project) NA41, national coordinator
Giuseppe Marmo.
- 2004-2013 Bilateral exchange programme: INFN-MCINN (Napoli-Zaragoza) (Spain).
Coordinators Giuseppe Marmo- Manuel Asorey.
- 1997-1998 *PRIN* (Progetto di Ricerca di Interesse Nazionale): SINTESI (Singolarità,
Integrabilità, Simmetrie) funded for 50 K€ National Coordinator Francesco
Calogero.

Administrative work (not including the one related to the above grants)

- 2021-present President of the national committee which awards the National Scientific
Habilitation, a requisite to apply for university professorships in Italy.
- 2021-present Member of the Scientific Committee of the Department of Physics (oversees
all scientific activities, development, recruitment etc.).
- 2019-present Member of the Governing Board del Dublin Institute for Advanced Studies
(Irish Republic).
- 2013-2017 Coordinator (Chairman) of the subdepartment *Theoretical Physics* of the
Physics Department of the Università di Napoli *Federico II*. The subdepart-
ment consisted of about forty academic staff.
- 2009-2013 Responsabile (Chairman) of the *Physics of the Universe and Theoretical*
section of the department of physics of the Università di Napoli *Federico II*.
The section consisted of about fifty academic staff.
- 2009-2013 Member of the Giunta (steering committee) of the Physics Degrees council
(coordinating body for all undergraduate degrees in physics and astronomy).
- 2008-2018 Member of the faculty of the Ph.D. programme of the University of Napoli.
- 2007-2013 Advisor for the theoretical curriculum of the Laurea magistrale (master
degree) of the Università di Napoli.

- 2003-2006 Member of the Giunta (steering committee) of the Faculty of Sciences.
- 2003-2005 Member of the Scientific Council of Ulisse, Website of Scientific Divulgateion:
<http://ulisse.sissa.it> .
- 1999-2001 Member of the Giunta (steering committee) of the Faculty of Sciences.
- 1998-2001 Member the Council for the Physics Degree Course as representative of the researchers.
- 1996-2001 Elected representative of the researchers in the council of the Faculty of Sciences.

Organization of Conferences and Advisory Committees

- 2021 Member of the Organizing Committee of the workshop *Workshop on Quantum Geometry, Field Theory and Gravity*, Corfu September 2019.
- 2019 Member of the Organizing Committee of the workshop *Workshop on Quantum Geometry, Field Theory and Gravity*, Corfu September 2019.
- 2019 Organizer and Member of the Scientific Committee del Meeting: *Problemi Attuali di Fisica Teorica*, Vietri sul Mare Salerno,(Italy) 13-17 April 2019.
- 2019 Member of the Scientific Organizing Committee della conferenza *COST ACTION MP1405: Quantum Structure of Spacetime* , Bratislva, Slovakia, February 2019.
- 2018 Organizer and Member of the Scientific Committee del Meeting: *Problemi Attuali di Fisica Teorica*, Vietri sul Mare Salerno,(Italy) 24-28 March 2018.
- 2017 Member of the Scientific Organizing Committee della conferenza *Quantum Space-time '18*, Sofia, Bulgaria, February 2018.
- 2018 Member of the International Advisory Committee of the conference *Quantum Physics: Fields, Particles and Information Geometry*, DIAS, Dublin January 2018.
- 2017 Member of the Organizing Committee of the workshop *Testing Fundamental Physics Principles*, Corfu September 2017.
- 2017 Member of the International Advisory Committee of the *CIMPA Research School Rencontres du Vietnam Noncommutative Geometry and Applications to Quantum Physics* July 12th - 22nd, 2017, Quy Nhon, Vietnam.
- 2016 Member of the Scientific Committee del Meeting: *Problemi Attuali di Fisica Teorica*, Vietri sul Mare Salerno,(Italy) 7-12 Aprile 2017.

- 2017 Member dello Scientific Organizing Committe della conferenza *Quantum Space-time '17*, Porto, Portogallo, February 2017.
- 2016 Organizer of the workshop *Testing Quantum Gravity*, Torino (Italy), May 2016.
- 2016 Member of the Scientific Committee of the Meeting: *Problemi Attuali di Fisica Teorica*, IIASS E.R. Caianiello, Vietri sul Mare Salerno, (Italy) 18-23 March 2016.
- 2016 Member of the Scientific Organizing Committe of the conference *Quantum Space-time '16*, Zakopane, Poland, February 2016.
- 2015 Member of the Scientific Committee of the Meeting: *Problemi Attuali di Fisica Teorica*, IIASS E.R. Caianiello, Vietri sul Mare Salerno, (Italy) 20-27 March 2015.
- 2012 Organizer of the workshop: *Incontri di geometria noncommutativa. A Neapolitan Workshop on Noncommutative Geometry*, Napoli September 2012.
- 2011 Organizer of workshop "*Funingeo, Folding and Unfolding in Geometry, a workshop in honour of Beppe Marmo's 65th birthday*", Ischia, June 2011.
- 2009 Organizer of workshop "*The Physics of the Spectral Action*", IHES, Paris, December 2009.
- 2008 Member of the International Advisory Committe of the Summer School *New Paths Towards Quantum Gravity*, Holbaek, Denmark.
- 2003 Chairman of the organizing committee del convegno *Spacetime and Fundamental Interactions: Quantum Aspects*, in honour of A.P. Balachandran, Vietri sul mare 26-31 maggio 2003.
- 2002 Organizer of the Meeting: *Problemi Attuali di Fisica Teorica*, IIASS E.R. Caianiello, Vietri sul Mare Salerno, (Italy) 20-27 March 2002.
- 2000 Organizer of the *EuroConference on Brane new world and Non-Commutative Geometry*, 2 - 7 Ott. 2000 - Villa Gualino, Torino.
- 2000 Organizer of the Meeting: *Problemi Attuali di Fisica Teorica*, IIASS E.R. Caianiello, Vietri sul Mare Salerno, (Italy) 14 Aprile - 20 Aprile.
- 2000-1999 Organizer of the EuroConference on *Non-Commutative Geometry And Hopf Algebras In Field Theory And Particle Physics*, 20 - 30 Sept. 1999 - Villa Gualino, Torino.
- 1999 Member of the International Advisory Committee del Minnowbrook Symposium *On Structure Of Space-Time*, Syracuse NY, May 28-31, 1999.
- 1998 Organizer of the workshop *Noncommutative Geometry and Fundamental Interactions II*, IIASS, Vietri sul mare.

- 1996 Organizer of the Seminario di Fisica Teorica *Geometria Noncommutativa*, IIASS, Vietri Sul Mare.
- 1995 Organizer del Meeting *Discretization Methods in Theoretical Physics*, IIASS, Vietri Sul Mare.
- 1991-1993 Organizer of the seminars of mathematical Physics (Napoli).
- 1990-1991 In charge of the Preprint service at the International Centre for Theoretical Physics.
- 1987-1988 Organizer of the theoretical Seminars (Rutherford Appleton Laboratory).
- 1988 Organizer of the meeting: *String Theory*, Cosener's House (Rutherford Laboratory).
- 1987 Organizer of the meeting: *Berry Phases and Topology*, Cosener's House (Rutherford Laboratory).

Doctoral Thesis Advised

(the these are usually on the ArXiv)

Candidate/Title	Year
Mattia Manfredonia <i>Observers and Momenta in κ-Minkowski space-time</i> (coadvisor Flavio Mercati)	2020
Agostino Devastato <i>Particle Physics and Symmetries in Noncommutative Geometry</i>	2015
Maxim Kurkov <i>Spectral Regularization and its Applications in Quantum Field Theory</i>	2014
Salvatore Galluccio <i>Non-commutative Field Theory, Translational Invariant Products and Ultraviolet/Infrared Mixing</i> (coadvisor Patrizia Vitale)	2010
Carmine del Mondo <i>PDM: Predator Data Mining, un Nuovo Approccio al Data Mining Unsupervised</i> (Ph. D. in informatics)	2009
Alessandra Agostini <i>Fields and symmetries in kappa-Minkowski noncommutative spacetime,</i> (coadvisor Giovanni Amelino-Camelia)	2006

Alessandro Zampini 2004
Applications of the Weyl-Wigner formalism to noncommutative geometry
(coadvisor Giuseppe Marmo)

Master Thesis Advised

Candidate	Year
Luca Scala (Coadvisor Patrizia Vitale)	2021
Martina Adamo (Coadvisor Flavio Mercati)	2021
Claudio Iuliano (Coadvisor Manuel Asorey)	2019
Lorenzo Leone (Coadvisor Maxim Kurkov)	2019
Salvatore F.E. Oliviero (Coadvisor Maxim Kurkov)	2019
Agostino Devastato	2011
Gennaro Tedesco (coadvisor Patrizia Vitale)	2011
Chiara Esposito (coadvisor Patrizia Vitale)	2008
Bernardino Spisso	2007
Luigi Parlato	2007
Dario Capasso	2006
Salvatore Galluccio	2006
Alessandro Valentino	2004
Alessandro Zampini	2001
Antonio Russo (coadvisor Giuseppe Marmo)	1994

I have followed also 23 “laurea” (three year curriculum) thesis: F. Baruffa, A. Garzilli, G. De Rosa, E. Passaro, A. Mezzacapo, M. De Cesare, V. Della Rocca, F.M. Ciaglia, I. Vettigli, L. Barretta, S.F.E. Oliviero, C. Caprioli, O. D’Angola, S. Niro, L. Leone, G. Esposito, Mattia Cozzolino, A. Pinto, P. Di Meo, G. Magliocco, Miriam Cozzolino, A. Sdino, G. Lo Giudice.

Doctoral Evaluations Committees

2022	Damiano Fiorillo,	Università di Napoli Federico II	Chariman of the Committee
2022	Mattia Conte,	Università di Napoli Federico II	Chariman of the Committee
2022	Sayan Pal,	University of Kolkata, India	Rapporteur
2021	Adam Magee,	Sissa Trieste	Rapporteur and Committee Member
2020	Lodovico Capparelli,	Università di Roma (<i>La Sapienza</i>)	Committee Member
2020	Valerio Casconi,	Università di Roma (<i>La Sapienza</i>)	Committee Member
2020	Cristiano Sebastiani,	Università di Roma (<i>La Sapienza</i>)	Committee Member
2020	Mehdi Shokri ,	Università di Roma (<i>La Sapienza</i>)	Committee Member
2020	Michelangelo Palmisano,	Università di Roma (<i>La Sapienza</i>)	Rapporteur and Committee Member
2019	Emanuele Filaci,	Université de Paris Sorbonne	Rapporteur and Committee Member
2018	Nadir Bizi,	Université de Paris Sorbonne	Rapporteur and Committee Member
2018	Thimotè Poulain,	Université de Paris Orsay	Rapporteur and Committee Member
2017	Francesco Brighenti,	Università di Bologna	Committee Chairman
2014	Thijs Van Der Broek,	Radboud University, Nijmegen, NL	Committe Member
2011	Rosangela Canonico,	Università di Salerno	Committe Member
2008	Marco Valli,	Università di Roma <i>La Sapienza</i>	Committee Member
2008	Antonino Marciànò,	Università di Roma <i>La Sapienza</i>	Rapporteur and Committee Member
2007	Cosmo Lupo,	Università di Napoli <i>Federico II</i>	Committee Chairman
2007	Luca Forte,	Università di Napoli <i>Federico II</i>	Committee Chairman
2007	Raffaele Carlone,	Università di Napoli <i>Federico II</i>	Committee Chairman
2007	Ruben Coehn Cagli,	Università di Napoli <i>Federico II</i>	Committee Chairman
2006	Samuel Halliday,	Heriot-Watt University, Edinburgh	Rapporteur and Committe Member
2004	Nicola Rossano,	Università di Roma III	Rapporteur
2003	Fabrizio Canfora,	Università di Salerno	Committe Member
2003	Filippo Maimone,	Università di Salerno	Committee Member
2003	Elisabetta di Grezia,	Università di Napoli <i>Federico II</i>	Rapporteur
2001	Pierre Martinetti,	Université de Marseille	Rapporteur and Committee Member
1999	Awatif Belymam,	Université de Casablanca.	Committee Member
1999	Jèsus Clemente-Gallardo,	Universidad de Zaragoza	Rapporteur and Committe Member
1999	Thomas Krajewski,	Université de Marseille	Rapporteur and Committee Member

Scientific Achievements

- Author of more than one hundred articles on international refereed journals.
- Editor of the Journal of Theoretical Physics A (World Scientific).
- Editor of Modern Physics Letters A (World Scientific).
- Member of the Editorial Board of Advances in Mathematical Physics (2009-2013).
- Referee for the following journals: Classical and Quantum Gravity, Foundations of Science, Foundations of Physics, General Relativity and Gravitation, International Journal of Modern Physics, Journal of Geometry and Physics, Journal of High Energy Physics, Journal of Mathematical Physics, Journal of Physics A, Modern Physics Letters, Nuclear Physics, Physical Review, Physical Review Letters, Physics Letters, Sigma, Annals of Physics (NY), The European Physical Journal - Plus, International Journal of Geometrical Methods in Modern Physics.
- Speaker for well over one hundred times in seminars and conferences in various universities and research centres in Italy, United States, Canada, Great Britain, Spain, India, Austria, Denmark, Costa Rica, France, Brazil, Portugal, Germany, Morocco, Lebanon, Ireland, Switzerland, Greece, Slovakia, Croatia, the Czech Republic, Poland, Sweden, the Netherlands, Serbia, Vietnam. A partial list follows.
- Evaluator for projects for the European Union (Marie Curie and COFUND grants), The Cost initiative, Chile, Croatia, Ireland (IRCSET), Italy (INFN and Universities), Poland, Spain and the Netherlands.

List of Publications

Preprints

- p2 G. Gubitosi, F. Lizzi, J. J. Relancio and P. Vitale, *Double Quantization*, [arXiv:2112.11401 [hep-th]].
- p1 F. D'Andrea, G. Landi and F. Lizzi, *Tolerance Relations and Quantization*, [arXiv:2112.09698 [math.OA]].

Published Papers

- a104 F. Lizzi, *Quantum Spacetime, Noncommutative Geometry and Observers*, Universe **8** (2021) no.1, 24 doi:10.3390/universe8010024
- a103 F. Lizzi and F. Mercati, *κ -Poincaré-comodules, Braided Tensor Products and Noncommutative Quantum Field Theory*, Phys. Rev. D **103** (2021), 126009.
- a102 F. Lizzi and P. Vitale, *Time Discretization From Noncommutativity*, Phys. Lett. B **818** (2021), 136372
- a101 A. Carotenuto, F. Lizzi, F. Mercati and M. Manfredonia, *The Weyl-Mellin quantization map*, Int. J. of Geometric Methods in Modern Physics, on line ready: <https://doi.org/10.1142/S0219887822500311>.
- a100 F. Lizzi, A. Pinzul, A. Stern and C. Xu, *Asymptotic commutativity of quantized spaces: The case of $\mathbb{C}P^{p,q}$* , Phys. Rev. D **102** (2020) no.6, 065012
- a99 F. Lizzi, M. Manfredonia and F. Mercati, *Localizability in κ -Minkowski spacetime*, Int. J. Geom. Meth. Mod. Phys. **17** (2020) no.suppl01, 2040010
- a98 N. Huggett, F. Lizzi and T. Menon, *Missing the point in noncommutative geometry*, Synthese, (2021). <https://doi.org/10.1007/s11229-020-02998-1>
- a97 *The Momentum Spaces of κ -Minkowski noncommutative spacetime*, F. Lizzi, F. Mercati and M. Manfredonia, Nucl. Phys. B **958** (2020), 115117 [arXiv:2001.08756 [hep-th]].
- a96 *"Spectral Noncommutative Geometry, Standard Model and all that*, A. Devastato, M. Kurkov and F. Lizzi, Int. J. Mod. Phys. A **34** (2019) no.19, 1930010.
- a95 *Points. Lack thereof*, F. Lizzi, Zagadnienia Filozoficzne w Nauce **66**, 35 (2019).
- a94 *Localization and Reference Frames in κ -Minkowski Spacetime*, F. Lizzi, M. Manfredonia, F. Mercati and T. Poulain, Phys. Rev. D **99** (2019) no.8, 085003.
- a93 *Noncommutative field theory from angular twist*, M. Dimitrijevic Ciric, N. Konjik, M. A. Kurkov, F. Lizzi and P. Vitale, Phys. Rev. D **98** (2018) no.8, 085011.

- a92 *Entangled Scent of a Charge*, M. Asorey, A. P. Balachandran, F. Lizzi and G. Marmo, JHEP **1805** (2018) 130.
- a91 *Clifford Structures in Noncommutative Geometry and the Extended Scalar Sector*, M. A. Kurkov and F. Lizzi, Phys. Rev. D **97** (2018) no.8, 085024.
- a90 *The Kirillov picture for the Wigner particle*, J. M. Gracia-Bondia, F. Lizzi, J. C. Varilly and P. Vitale, J. Phys. A **51** (2018) no.25, 255203.
- a89 *Lorentz signature and twisted spectral triples*, A. Devastato, S. Farnsworth, F. Lizzi and P. Martinetti, JHEP **1803** (2018) 089.
- a88 *Dimensional deception from noncommutative tori: An alternative to the Horava-Lifshitz model,” F. Lizzi and A. Pinzul, Phys. Rev. D **96** 126013 (2017).*
- a87 *Equations of motion as constraints: superselection rules, Ward identities*, M. Asorey, A.P. Balachandran, F. Lizzi, G. Marmo JHEP **3**, 136 (2017).
- a86 *Wick Rotation and Fermion Doubling in Noncommutative Geometry*, F. D’Andrea, M.A. Kurkov, F. Lizzi, Phys. Rev. D **94**, 025030 (2016).
- a85 *Effective cosmological constant induced by stochastic fluctuations of Newton’s constant*, M. De Cesare, F. Lizzi, M. Sakellariadou, Phys. Lett. B760 (2016) 498.
- a84 *Spectral geometry for quantum spacetime*, F. Lizzi, Nuovo Cim. C **38** (2016) 165.
- a83 *Inconstant Planck’s constant*, G. Mangano, F. Lizzi and A. Porzio, Int. J. Mod. Phys. A **30** (2015) 34, 1550209
- a82 *Green’s functions for translation invariant star products*, F. Lizzi, M. Rivera and P. Vitale, Mod. Phys. Lett. A **30** (2015) 36, 1550194.
- a81 *Spectral action with zeta function regularization*, M. A. Kurkov, F. Lizzi, M. Sakellariadou and A. Watcharangkool, Phys. Rev. D **91** (2015) 6, 065013.
- a34 *A nonperturbative form of the spectral action principle in noncommutative geometry*, H. Figueroa, J.M. Gracia-Bondia, F. Lizzi and J.C. Varilly, J. of Geometry and Physics **26** (1998) 329-339.
- a33 *Quantum Phase Space from String Solitons*, F. Lizzi and N.E. Mavromatos, Phys. Rev. **D55** (1997) 7859.

- a32 *Fermion Hilbert Space and Fermion Doubling in the Noncommutative Geometry Approach to Gauge Theories*, F. Lizzi, G. Mangano, G. Miele and G. Sparano, *Phys. Rev.* **D55** (1997) 6357.
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