

Paolo Aschieri

Curriculum vitae

BIO AND EDUCATION

Laurea in Fisica Teorica, Università di Torino, 1991, 110 cum Laude.

Master of Science in Physics, University of California, Los Angeles 1993.

Perfezionato (Ph.D.) in Fisica Teorica, Scuola Normale Superiore, Pisa, 1998, 70 cum Laude,

Thesis title: *On the Geometry of Inhomogeneous Quantum Groups*. published by Scuola Normale

Advisors: L. Castellani, C. De Concini. Referees: P. Kulish, B. Zumino.

Post-Docs abroad:

INFN e CNR matematica at U.C. Berkeley, 3 years (1997 – 2000).

Alexander von Humboldt, and Marie-Curie research fellow at Sektion Physik, Chair Prof. J. Wess, U. Munich (LMU), 3 years (2000 - 2003).

Post-doc U. Piemonte Orientale and visiting senior researcher U. Munich 2, years (2003- 2005)

Author of more than 60 publications in theoretical and mathematical physics.

Co-author of the invited monograph *Noncommutative Spacetimes* (Springer).

More than 60 presentations in conferences and in invited seminars.

Vice-Chair of the COST Action network “Quantum Structure of Spacetime” MP1405 (2015-2019) supported by the EU Framework Programme Horizon 2020.

UNIVERSITY CAREER

2013-	Assistant Professor UPO
2010-2013	Post Doc and Adjunct Professor UPO
2006-2009	Centro Enrico Fermi “New Talent” fellow at UPO
2005-2006	Post-doc UPO

SCIENTIFIC POSITIONS

2015-	Vice-Chair dell’azione COST “Quantum Structure of Spacetime” MP1405 [QSPACE] sostenuta dell’ EU Framework Programme Horizon 2020.
2013	Editor of the “International Journal of Geometric Methods in Modern Physics” (World Scientific).
2010-	Editor of the international journal “SIGMA” (Symmetry, Integrability and Geometry: Methods and Applications)
2009-2013	Editor of the international “Journal of General Relativity and Gravitation” (Springer). 2009-2013

MAIN FIELDS OF INTEREST

- 1) Gravity, gauge theories and differential geometry on noncommutative spacetimes (\ast -product deformed, fuzzy, discrete),
- 2) Higher gauge theories and their underlying bundle gerbe structures,
- 3) Electric-magnetic duality rotations, supergravity and special Kaehler geometry,
- 4) Noncommutative geometry and instantons,
- 5) Quantum Groups.

TOP FIVE PAPERS

1. P. Aschieri and A. Schenkel, Noncommutative connections on bimodules and Drinfeld twist deformation, [arXiv:1210.0241 [math.QA]]. Adv. Theor. Math. Phys. 18 (2014) 513-612, 100pp.
2. P. Aschieri and L. Castellani, Noncommutative D=4 gravity coupled to fermions, JHEP 0906 (2009) 086 [arXiv:0902.3817 [hep-th]], 18 pp.
3. P. Aschieri, M. Dimitrijevic, F. Meyer, and J. Wess, Noncommutative Geometry and Gravity, [arXiv:hep-th/0510059], Class.Quant.Grav.23:1883-1912,(2006) p. 29.
4. P. Aschieri, C. Blohmann, M. Dimitrijevic, F. Meyer, P. Schupp and J. Wess, A gravity theory on noncommutative spaces, [arXiv:hep-th/0504183], Class. Quantum Grav. 22 3511-3532 (2005) p. 22.
5. P. Aschieri, L. Cantini and B. Jurco, Nonabelian Bundle Gerbes, their Differential Geometry and Gauge Theory, [arXiv:hep-th/0312154], Commun. Math. Phys. 254:367-400,2005 p. 34.

FURTHER PUBLICATIONS

6. P. Aschieri, D. Brace, B. Morariu, B. Zumino, Nonlinear self-duality in even dimensions hep-th/9909021, Nucl. Phys. B574, (2000) 551-570, p. 20
7. P. Aschieri, F. Lizzi and P. Vitale, Twisting all the way: from Classical Mechanics to Quantum Fields, arXiv:0708.3002 [hep-th]. Phys. Rev. D 77, 025037 (2008), 16pp.
8. P. Aschieri, S. Ferrara, B. Zumino, Duality Rotations in Nonlinear Electrodynamics and in Extended Supergravity, invited contribution to Rivista del Nuovo Cimento in occasion of the 2005 Enrico Fermi Prize of the Italian Physical Society. Vol. 031, 625, (2008) 83 pp. [arXiv:0807.4039 [hep-th]].