LIVIO PIZZOCCHERO

Breve curriculum, attività scientifica e pubblicazioni (Italiano)

Short curriculum, scientific activity and publications (English)

ITALIANO

Livio Pizzocchero (laureato in Fisica, con lode, nel 1986 e Dottore di Ricerca in Fisica Teorica nel 1990 presso l'Università degli Studi di Milano) dal novembre 2005 è Professore Associato confermato di Fisica Matematica presso il Dipartimento di Matematica dell'Università degli Studi di Milano, dove in precedenza ha prestato servizio come Ricercatore (novembre 1991-novembre 2002) e Professore Associato non confermato (novembre 2002-novembre 2005). Il 17 ottobre 2014 ha conseguito l'abilitazione a Professore Ordinario di Fisica Matematica (Abilitazione Scientifica Nazionale, tornata 2013).
Livio Pizzocchero è affiliato all'Istituto Nazionale di Fisica Nucleare, con incarico di ricerca, e aderisce al Gruppo Nazionale per la Fisica Matematica dell'INdAM. Ha partecipato a progetti di ricerca finanziati dal MIUR e dall'Istituto Nazionale di Fisica Nucleare. Ha svolto l'attivita di referee per conto di riviste internazionali di fisica matematica e fisica teorica.
Le pubblicazioni scientifiche di Livio Pizzocchero, elencate di seguito, sono a grande maggioranza articoli su riviste internazionali con referee registrate nei database ISI-Web of Science e Scopus; agli articoli su rivista si aggiunge un libro, pubblicato da un editore scientifico internazionale.
Il seguente curriculum contiene una lista di citazioni raccolte nella letteratura scientifica dalle suddette pubblicazioni (aggiornata alla data di settembre 2016).

Nella sua attività scientifica, Livio Pizzocchero ha trattato i seguenti temi di ricerca:

• Teoria delle varietà simplettiche, riemanniane e kähleriane infinito-dimensionali. Uso di questi strumenti geometrico-differenziali in rapporto a questioni fondazionali di meccanica quantistica [2] [3] [4] [5].
• Applicazione degli stessi strumenti alla teoria delle C^*-algebre: costruzione di versioni non commutative del teorema di rappresentazione funzionale di Gelfand [7].
• Struttura differenziale dei tori invarianti per i sistemi hamiltoniani integrabili con spazio delle fasi infinito-dimensionale [1].

• Strutture geometriche ed algebriche fondamentali nella teoria dei sistemi integrabili: formalismo di Lax e bi-hamiltoniano, teoria della matrice R. Applicazioni alle equazioni solitoniche, ai reticoli di tipo Toda e alla teoria del corpo rigido multidimensionale [10] [12] [13] [14] [15] [16] [24] [25].
• Supersimmetrizzazione delle equazioni solitoniche; aspetti generali della teoria dei sistemi integrabili su supervarietà [6] [8] [9] [11] [20].
• Studi di storia della matematica: la geometria differenziale in Italia, con particolare riferimento al periodo tra le due guerre mondiali [17].
• Metodi di approssimazione per funzioni speciali [22].
• Aspetti deterministici e stocastici nei processi con nucleazione e crescita di grani [28] [30].
• Risultati di esistenza su tempi lunghi e stima dell'errore del metodo della media per sistemi integrabili finito-dimensionali perturbati. Applicazioni al moto dei satelliti [27] [31] [32].
• Spazi di Sobolev: disuguaglianze di immersione, stime alla Nash-Moser sul prodotto puntuale di funzioni e sugli operatori nonlineari di composizione con una funzione data (operatori di Nemytskij). Stime sulle migliori costanti in alcune di queste disuguaglianze [18] [19] [21] [26] [36] [38] [46] [48].
• Equazioni di evoluzione semi- o quasi- lineari in spazi di Banach; stime sull'intervallo di esistenza e proprietà di regolarità delle soluzioni esatte, deducibili dall'analisi " a posteriori" di soluzioni approssimate [23] [29].
• Applicazioni dello schema precedente alle equazioni di Eulero o Navier-Stokes: esistenza e regolarità locale o globale delle soluzioni, tramite analisi a posteriori di soluzioni approssimate [34] [37] [39] [40] [41] [43] [56]. Estensione di questo approccio alla magnetoidrodinamica (MHD) [53].
• Approccio rigoroso alla rinormalizzazione in teoria quantistica dei campi: applicazioni all'effetto Casimir [35] [44] [45] [47] [49].
• Teoria della relatività generale: spazi-tempi con curve temporali chiuse [50] e "wormholes" [51] [54].
• Modelli cosmologici che coinvolgono campi scalari [52] [55].

ENGLISH

Livio Pizzocchero (degree in Physics, summa cum laude, in 1986 and PhD in Theoretical Physics in 1990 at the University of Milano) is currently Associate Professor of Mathematical Physics in the Department of Mathematics of the Università degli Studi di Milano; on October 17, 2014 he obtained the Italian national habilitation for a Full Professorship in Mathematical Physics (Abilitazione Scientifica Nazionale, tornata 2013).
Livio Pizzocchero is affiliated to the Italian Istituto Nazionale di Fisica Nucleare and to the Italian Istituto Nazionale di Alta Matematica. He took part in several research projects sponsored by by the Italian Ministry of University and by the Istituto Nazionale di Fisica Nucleare. He served as a referee for several international journals in the areas mathematical physics or theoretical physics.
The scientific publications of Livio Pizzocchero are listed hereafter. Most of them are articles in international refereed journals recorded in the databases ISI-Web of Science and Scopus; in addition, a book by an international publisher should be mentioned.
The present curriculum contains a list of citations received by these publications in the scientific literature (updated to September 2016).

The scientific activity of Livio Pizzocchero has dealt with the following subjects:

• Infinite-dimensional symplectic, Riemannian and Kählerian manifolds: general theory, and applications to quantum mechanics [2] [3] [4] [5].
• Applications of the same geometrical tools to the theory of C^*-algebras: non commutative versions of Gelfand's functional representation theorem [7].
• Integrable Hamiltonian systems with infinte-dimensional phase space, and differential structures for their invariant tori [1].
• Basic algebraic and geometrical structures in the theory of integrable systems: Lax and biHamiltonian formalism, R-matrix theory. Applications to soliton equations, to lattices of the Toda type and to the multidimensional rigid body [10] [12] [13] [14] [15] [16] [24] [25].
• Supersymmetric soliton equations; general aspects in the theory of integrable systems on supermanifolds [6] [8] [9] [11] [20].

• History of Italian mathematics (especially, of differential geometry in the period between the two World Wars) [17].
• Approximation techniques for special functions [22].
• Deterministic and stochastic models for crystal growth [28] [30].
• Existence results over long times and error estimates about the averaging method for pertubations of finite-dimensional integrable systems. Applications to satellite motions [27] [31] [32].
• Sobolev spaces: imbedding inequalities, estimates of the Nash-Moser type on pointwise multiplication and on the nonlinear operators of composition with a given function (Nemytskij operators). Estimates on the best constants in some of these inequalities [18] [19] [21] [26] [36] [38] [46] [48].
• Semi- or quasi-linear evolution equations in Banach spaces: estimates on the interval of existence and regularity properties of exact solutions, derivable from the "a posteriori analysis" of approximate solutions [23] [29].
• Applications of the previous framework to the Euler or Navier-Stokes equations: local or global existence and regularity of the solutions, via a posteriori analysis of approximate solutions [34] [37] [39] [40] [41] [42] [43] [56]. Extension of this approach to magnetohydrodinamics (MHD) [53].
• Rigorous approach to renormalization in quantum field theory; applications to the Casimir effect [35] [44] [45] [47] [49].
• General relativity: spacetimes with closed timelike curves [50], wormholes [51] [54].
• Cosmological models involving scalar fields [52] [55].

ARTICLE:= link to the published article;
E-PRINT:= link to the arXiv e-print

[1] R. Cirelli, L. Pizzocchero, *On the Integrability of Quantum Mechanics as an Infinite-Dimensional Hamiltonian System*, Nonlinearity **3**, 1057-1080 (1990). ARTICLE

[2] R. Cirelli, A. Manià, L. Pizzocchero, *Quantum Mechanics as an Infinite-Dimensional Hamiltonian System with Uncertainty Structure. Part I*, J. Math. Phys. **31**, 2891-2897 (1990). ARTICLE

[3] R. Cirelli, A. Manià, L. Pizzocchero, *Quantum Mechanics as an Infinite-Dimensional Hamiltonian System with Uncertainty Structure. Part II*, J. Math. Phys. **31**, 2898-2903 (1990). ARTICLE

[4] L. Pizzocchero, *La meccanica di Schrödinger nell' approccio geometrico. Completa integrabilità*, Tesi di dottorato, III Ciclo, Università degli Studi di Milano (1990).

[5] R. Cirelli, A. Manià, L. Pizzocchero, *Quantum Phase Space Formulation of Schrödinger Mechanics*, Int. J. Mod. Phys. A **6**, 2133-2146 (1991). ARTICLE

[6] C. Morosi, L. Pizzocchero, *On the biHamiltonian Structure of the Supersymmetric KdV Hierarchies. A Lie Superalgebraic Approach*, Commun. Math. Phys. **158**, 267-288 (1993). ARTICLE

[7] R. Cirelli, A. Manià, L. Pizzocchero, *A Functional Representation for Non Commutative C^*-Algebras*, Rev. Math. Phys. **6**, 675-697 (1994). ARTICLE

[8] C. Morosi, L. Pizzocchero, *Osp(3,2) and gl(3,3) Supersymmetric KdV hierarchies*, Phys. Lett. A **185**, 241-252 (1994). ARTICLE

[9] C. Morosi, L. Pizzocchero, *On the Equivalence of two Super KdV Theories: a BiHamiltonian Viewpoint*, J. Math. Phys. **35**, 2397-2407 (1994). ARTICLE

[10] C. Morosi, L. Pizzocchero, *On the biHamiltonian Interpretation of the Lax Formalism*, Rev. Math. Phys. **7**, 389-430 (1995). ARTICLE

[11] C. Morosi, L. Pizzocchero, *A Fully Supersymmetric AKNS Theory*, Commun. Math. Phys. **176**, 353-381 (1996). ARTICLE

[12] C. Morosi, L. Pizzocchero, *On the Euler Equation: biHamiltonian Structure and Integrals in Involution*, Letters in Math. Phys. **37**, 117-135 (1996). ARTICLE

[13] C. Morosi, L. Pizzocchero, *R-matrix Theory, Formal Casimirs and the Periodic Toda Lattice*, J. Math. Phys. **37**, 4484-4513 (1996). ARTICLE

[14] C. Morosi, L. Pizzocchero, *On the Continuous Limit of Integrable Lattices I. The Kac-Moerbeke System and KdV Theory*, Commun. Math. Phys. **180**, 505-528 (1996). ARTICLE

[15] C. Morosi, L. Pizzocchero, *On the Continuous Limit of Integrable Lattices II. Volterra Systems and $sp(N)$ Theories*, Rev. Math. Phys. **10**, 235-270 (1998). ARTICLE

[16] C. Morosi, L. Pizzocchero, *On the Continuous Limit of Integrable Lattices III. Kupershmidt Systems and $sl(N+1)$ KdV Theories*, J. Phys. A: Math. Gen. **31**, 2727-2746 (1998). ARTICLE

[17] L. Pizzocchero, *Geometria differenziale*, a chapter of the book "La matematica in Italia dopo l' unità. Il periodo tra le due guerre mondiali" ("Italian Mathematics after Unification. The period between the World Wars"), pp. 321-379; edited by S. Di Sieno, A. Guerraggio, P. Nastasi, Ed. Marcos y Marcos, Milano. First edition, 1998, Second Edition, 2000.

[18] C. Morosi, L. Pizzocchero, *On the constants for some Sobolev imbeddings*, Journal of Inequalities and Applications **6**, 665-679 (2001). ARTICLE, E-PRINT

[19] C. Morosi, L. Pizzocchero, *On the constants in some inequalities for the Sobolev norms and pointwise product*, Journal of Inequalities and Applications **7**, 421-452 (2002). ARTICLE, E-PRINT

[20] C. Morosi, L. Pizzocchero, *Bihamiltonian reduction and SUSY KdVs*, in "Concise Encyclopedia of Supersymmetry", pages 58-80, edited by J. Bagger, S. Duplij, W. Siegel, Kluwer Academic Publishers (2004) ([1]). ARTICLE

[1] Among the contributors to this Encyclopedia, there are A. Connes (Fields medalist) and G. t'Hooft (Nobel Prize for Physics).

[21] C. Morosi, L. Pizzocchero, *Quantitative functional calculus in Sobolev spaces*, Journal of Function Spaces and Applications **2**(3), pp. 279-321 (2004). ARTICLE, E-PRINT

[22] C. Morosi, L. Pizzocchero, *On the expansion of the Kummer function in terms of incomplete Gamma functions*, Archives of Inequalities and Applications **2** (1), pp. 49-72 (2004). ARTICLE, E-PRINT

[23] C. Morosi, L. Pizzocchero, *On approximate solutions of semilinear evolution equations*, Rev. Math. Phys. **16**(3) pp. 383-420 (2004). ARTICLE, E-PRINT

[24] C. Morosi, L. Pizzocchero, *On a theorem by Treves*, J.Math. Phys. **45**(9), pp. 3558-3564 (2004). ARTICLE, E-PRINT

[25] C. Morosi, L. Pizzocchero, *On the Treves theorem for the Ablowitz-Kaup- Newell- Segur equation*, J.Math. Phys. **45**(12), pp. 4737-4753 (2004). ARTICLE, E-PRINT

[26] C. Morosi, L. Pizzocchero, *On the constants for multiplication in Sobolev spaces*, Advances in Applied Mathematics **36**(4), pp. 319-363 (2006). ARTICLE, E-PRINT

[27] C. Morosi, L. Pizzocchero, *On the average principle for one frequency systems*, J. Phys. A: Math. Gen. **39**(14), pp. 3673-3702 (2006). ARTICLE, E-PRINT

[28] M. Burger, V. Capasso, L. Pizzocchero, *Mesoscale averaging of nucleation and growth models*, Multiscale Modeling and Simulation **5**(2), pp. 564–592 (2006). ARTICLE

[29] C. Morosi, L. Pizzocchero, *On approximate solutions of semilinear evolution equations II. Generalizations, and applications to Navier-Stokes equations*, Reviews in Mathematical Physics **20**(6), 625-706 (2008). ARTICLE, E-PRINT

[30] D. Aquilano, V. Capasso, A. Micheletti, S. Patti, L. Pizzocchero, M. Rubbo, *A birth and growth model for kinetic-driven crystallization processes, Part I: Modeling*, Nonlinear Analysis, Real World Applications, **10**(1), pp. 71-92 (2009). ARTICLE

[31] C. Morosi, L. Pizzocchero, *On the averaging principle for one frequency systems. Seminorm estimates for the error*, Nonlinear Dynamics **57**(3), pp. 321-334 (2009). ARTICLE, E-PRINT

[32] C. Morosi, L. Pizzocchero, *On the averaging principle for one frequency systems. An application to satellite motions*, Nonlinear Dynamics **58**(1-2), 273-294 (2009). ARTICLE, E-PRINT

[33] C. Morosi, L. Pizzocchero, *New results on multiplication in Sobolev spaces*, Advances in Applied Mathematics **44**(4), pp. 393-432 (2010). ARTICLE, E-PRINT

[34] C. Morosi, L. Pizzocchero, *An H^1 setting for the Navier-Stokes equations: quantitative estimates*, Nonlinear Analysis **74**(6), pp. 2398-2414 (2011). ARTICLE, E-PRINT

[35] D. Fermi, L. Pizzocchero, *Local zeta regularization and the Casimir effect*, Prog. Theor. Phys. **126**(3), pp. 419-434 (2011). ARTICLE, E-PRINT

[36] C. Morosi, L. Pizzocchero, *On the constants in a Kato inequality for the Euler and Navier-Stokes equations*, Commun. Pure Appl. Analysis **11**(2), pp. 557-586 (2012). ARTICLE, E-PRINT

[37] C. Morosi, L. Pizzocchero, *On approximate solutions of the incompressible Euler and Navier-Stokes equations*, Nonlinear Analysis **75**(4), pp. 2209-2235 (2012). ARTICLE, E-PRINT

[38] C. Morosi, L. Pizzocchero, *On the constants in a basic inequality for the Euler and Navier-Stokes equations*, Applied Mathematics Letters **26**(2), pp. 277-284 (2013). ARTICLE

The published version is an abridged version of the manuscript arXiv:1007.4412v3 [math.AP] 5 Sep 2012 E-PRINT.

[39] C. Morosi, M. Pernici, L. Pizzocchero, *On power series solutions for the Euler equation, and the Behr-Nečas-Wu initial datum*, ESAIM: Mathematical Modelling and Numerical Analysis **47**(3), pp. 663-688 (2013). (published on line on September 2012. DOI: 10.1051/m2an/2012041) ARTICLE, E-PRINT

[40] C. Morosi, L. Pizzocchero, *On the Reynolds number expansion for the Navier-Stokes equations*, Nonlinear Analysis: Theory Methods and Applications **95** (January 2014), 156-174. ARTICLE, E-PRINT

[41] C. Morosi, M. Pernici, L. Pizzocchero, *A posteriori estimates for Euler and Navier-Stokes equations*, in *Hyperbolic Problems: Theory, Numerics and Applications. Proceedings of the XIV International Conference held in Padova (June 25-29, 2012)*, edited by F. Ancona, A. Bressan, P. Marcati, A. Marson, AIMS Series on Applied Mathematics **8** (2014), 847-855. ARTICLE, E-PRINT

[42] C. Morosi, L. Pizzocchero, *Smooth solutions of the Euler and Navier-Stokes equations from the a posteriori analysis of approximate solutions*, Nonlinear Analysis **113** (2015), 298-308. ARTICLE, E-PRINT

[43] C. Morosi, M. Pernici, L. Pizzocchero, *Large order Reynolds expansions for the Navier-Stokes equations*, Appl. Math. Letters **49** (2015), 58-66. ARTICLE

The published version is an abridged version of the manuscript arXiv:1402.0487 [math.AP] E-PRINT.

[44] D. Fermi, L. Pizzocchero, *Local zeta regularization and the scalar Casimir effect III. The case with a background harmonic potential*, Internat. J. Modern Phys. A **30** (35) (2015), 1550213 (42 pages). ARTICLE, E-PRINT

[45] D. Fermi, L. Pizzocchero, *Local zeta regularization and the scalar Casimir effect IV. The case of a rectangular box*, arXiv:1505.03276 [math-ph] (2015), Internat. J. Modern Phys. A **31** (4-5) (2016), 1650003 (56 pages). ARTICLE, E-PRINT

[46] C. Morosi, M. Pernici, L. Pizzocchero, *New results on the constants in some inequalities for the Navier-Stokes quadratic nonlinearity*, Applied Mathematics and Computation **308** (2017), 54-72. ARTICLE

The published version is an abridged version of the manuscript arXiv:1511.00533 [math.AP] E-PRINT.

[47] **BOOK:** D. Fermi, L. Pizzocchero, *Local zeta regularization and the scalar Casimir effect. A general approach based on integral kernels* (276 pp.), World Scientific Publishing (November 2017). ISBN: 978-981-3224-99-5 (hardcover), ISSN 978-981-3225-01-5 (e-book). LINK TO PUBLISHER

[48] C. Morosi, L. Pizzocchero, *On the constants for some fractional Gagliardo-Nirenberg and Sobolev inequalities*, Expositiones Mathematicae **36**(1)(2018), 32-77. ARTICLE, E-PRINT

[49] D. Fermi, L. Pizzocchero, *Local Casimir effect for a scalar field in presence of a point impurity*, Symmetry 2018, **10**(2), 38 (20 pages); doi:10.3390/sym10020038, Special Issue "Casimir Physics and Applications". ARTICLE (OPEN ACCESS)

[50] D. Fermi, L. Pizzocchero, *A time machine for free fall into the past*, Classical and Quantum Gravity **35**(16) (2018), 165003 (42pp). ARTICLE, E-PRINT

[51] F. Cremona, F. Pirotta, L. Pizzocchero, *On the linear instability of the Ellis-Bronnikov-Morris-Thorne wormhole*, General Relativity and Gravitation (2019) 51:19 (15 pp). ARTICLE, E-PRINT

[52] D. Fermi, M. Gengo, L. Pizzocchero, *On the necessity of phantom fields for solving the horizon problem in scalar cosmologies*, Universe 2019 **5**(3), 76 (20 pages); doi:10.3390/universe5030076 (invited feature paper). ARTICLE (OPEN ACCESS)

[53] L. Pizzocchero, E. Tassi, *On approximate solutions of the equations of incompressible magnetohydrodynamics*, Nonlinear Analysis **195** (2020), 111726 (36 pp). ARTICLE, E-PRINT

[54] F. Cremona, L. Pizzocchero, O. Sarbach, *Gauge-invariant spherical linear perturbations of wormholes in Einstein gravity minimally coupled to a self-interacting phantom scalar field*, Physical Review D **101** (2020), 104061 (2020) (26 pp). ARTICLE, E-PRINT

[55] D. Fermi, M. Gengo, L. Pizzocchero, *Integrable scalar cosmologies with matter and curvature*, Nuclear Physics B **957** (2020), 115095 (102 pp). ARTICLE (OPEN ACCESS)

[56] L. Pizzocchero, *On the global stability of smooth solutions of the Navier-Stokes equations*, Appl. Math. Letters **115** (2021), 106970 (11 pp). ARTICLE, FREE ACCESS TO ARTICLE (IT EXPIRES ON 18/2/2021)

Citations of the publications of L. Pizzocchero (last update on September 12, 2016)

The following list has been obtained using mainly Web of Science and Google Scholar. I have excluded citations from papers authored by myself. The list contains some citations from papers by coauthors; in these cases, coauthors have been indicated putting a mark ¶ after their names.
After any citing paper, the expression: "Cit. : [X]" means that the paper cites work [X] in the list of my publications.
Citations are in inverse cronological order, and marked with a counter.

(1)(2) S. Albeverio (Institut für Angewandte Mathematik, Universität Bonn), C. Cacciapuoti (Dip. di Scienza e Alta Tecnologia, Università dell'Insubria, Como), M. Spreafico (Dip. di Matematica e Fisica Ennio De Giorgi, Università del Salento, Lecce),
Relative partition function of Coulomb plus delta interaction, arXiv:1510.04976v3 [math-ph] 6 Aug 2016.
Cit.: [44] [45]

(3) Bryan W. Roberts (Philosophy, Logic and Scientific Method Centre for Philosophy of Natural and Social Sciences London School of Economics and Political Science, London), Nicholas J. Teh (Dept. of Philosophy University of Notre Dame, USA),
Kähler Representation Theory, arXiv:1602.05979v1 [math-ph] 18 Feb 2016.
Cit.: [2]

(4) (5) (6) R. P. Kostecki (Perimeter Institute for Theoretical Physics, Waterloo, Ontario),
Local quantum information dynamics, arXiv:1605.02063v2 [quant-ph] 12 May 2016.
Cit.: [2] [3] [7]

(7) V. Moretti, D. Pastorello (Dip. di Matematica, Univ. di Trento),
Frame functions in finite-dimensional Quantum Mechanics and its Hamiltonian formulation on complex projective spaces, Int. J. Geom. Methods Mod. Phys. **13** 1650013 (30 pages) (2016); also available as arXiv:1311.1720 [math-ph]. Cit.: [7]

(8) Tudor S.Ratiu (Section de Mathematiques, Ecole Polythechnique Federale de Lausanne), Daisuke Tarama (Department of Mathematics, Kyoto University),
The $U(n)$free rigid body: Integrability and stability analysis of the equilibria, J. Differential Equations **259**(2015), 7284-7331.
Cit.: [12]

(9)(10) Mathieu Molitor (Instituto de Matematica, Universidade Federal da Bahia),
On the relation between geometricl quantum mechanics and information geometry, Journal of Geometric Mechanics **7**(2), 169-202 (2015).
Cit.: [2] [3]

(11) Hai-qiong Zhao (Department of Applied Mathematics, Shanghai University of International Business and Economics), Jinyun Yuan (Departamento de Matemática, Universidade Federal do Paraná, Centro Politécnico, Curitiba, Paraná, Brazil,
A semi-discrete integrable multi-component coherently coupled nonlinear Schrödinger system,
J. Phys. A: Math. Theor. **49** (2016) 275204 (17pp).
Cit.: [14]

(12)(13)(14) D. Blömker (Institut für Mathematik, Universität Augsburg), I. Romito (Dip. di Matematica, Univ. di Pisa),
Stochastic PDEs and lack of regularity: a surface growth equation with noise: existence, uniqueness, and blow-up, Jahresber. Dtsch. Math.-Ver. **117**(4), 233-286 (2015).
Cit.: [29] [34] [37]

(15)(16)(17) D. Blömker, C. Nolde (Institut für Mathematik, Universität Augsburg), J. Robinson (Mathematics Institute, University of Warwick),
Rigorous Numerical Verification of Uniqueness and Smoothness in a Surface Growth Model, J. Math. Anal. Appl. **429** 311-325 (2015). Also available as Preprint 16/2013 (29 August 2013), Institut für Mathematik, Universität Augsburg, at
`http://opus.bibliothek.uni-augsburg.de/opus4/frontdoor/index/index/year/2013/docId/2448`

Cit.: [29] [34] [37]

(18) (19) Mathieu Molitor (Instituto de Matematica, Universidade Federal da Bahia),
Gaussian distributions, Jacobi group, and Siegel-Jacobi space, J. Math. Phys. **55**, 122102 (2014).
Cit.: [2] [3]

(20) A. Bolsinov (Dept. of Mathematical Sciences, Loughborough University), A. Izosimov (Department of Mechanics and Mathematics, Moscow State University),
Singularities of Bi-Hamiltonian Systems, Commun. Math. Phys. 331, 507-543 (2014).
Cit. : [12]

(21) A. Guerraggio,
Pastori Maria, in: Dizionario Biografico degli Italiani, Vol. **81** (2014), Istituto dell'Enciclopedia Treccani.
Cit.: [17]

(22) (23) D. C. Brody (Mathematical Sciences, Brunel University, Uxbridge, UK),
Geometry of the complex extension of Wigner's theorem. J. Phys. A: Math. Theor. **46** (2013), 395301 (11pp). doi:10.1088/1751-8113/46/39/395301
See also arXiv:1305.0658v1 [math-ph] 3 May 2013
Cit.: [2] [3]

(24) A. Dobrigowska, T. Goliński (Institute of Mathematics, University in Bialystok, Poland),
Lie bundle on the space of deformed skew-symmetric matrices,
arXiv:1409.8550v1 [math-ph] 30 Sep 2014.
Cit.: [12]

(25) (26) P.G. Grinevic (Landau Institute for Theoretical Physics of Russian Academy of Sciennces. Moscow), P.M. Santini (Dipartimento di Fisica, Università La Sapienza),
Holomorphic eigenfunctions of the vector field associated with the dispersionless Kadomtsev-Petviashvili equation, J. Differential Equations **255**, 1469-1491 (2013). See also arXiv:1111.4446v1 [math-ph] 18 Nov 2011.
Cit. : [26] [33]

(27) Nenghui Kuang (School of Mathematics and Computing Science, Hunan University of Science and Technology, Hunan) Bingquan Liu,
Moderate deviation for parameter estimation in Rayleigh diffusion process, Communications in Statistics-Simulation and Computation,
http://www.tandfonline.com/doi/full/10.1080/03610918.2012.750355
Cit.: [22]

(28) (29) (30) Wei Fu (Dept. of Mathematics, Shanghai University, Shanghai), Zhijun Qiao (Dept. of Mathematics, The University of Texas-Pan American, Edinburg, Texas), Junwei Sun and Da-jun Zhang (Dept. of Mathematics, Shanghai University, Shanghai),
The semi-discrete AKNS system: Conservation laws, reductions and continuum limits, arXiv:1307.3671v1 [nlin.SI] 13 Jul 2013
Cit.: [14] [15] [16]

(31) (32) M. Molitor (Department of Mathematics, Keio University, Yokohama and Fakultät f'ur Mathematik, Ruhr-Universität, Bochum),
Exponential families, Kähler geometry and quantum mechanics, Journal of Geometry and Physics **70**, Pages 54-80 (August 2013). See also arXiv:1203.2056v1 [math.DG] 9 Mar 2012.
Cit. : [2] [3]

(33) Hai-Qiong Zhao (Business Information Management School, Shanghai Institute of Foreign Trade, Shanghai), Zuo-Nong Zhu (Dept. of Mathematics, Shanghai Jiao Tong University, Shanghai),
Solitons and dynamic properties of the coupled semidiscrete Hirota equation, AIP Advances **3**, 022111 (2013), doi: 10.1063/1.4791765
Cit.: [14]

(34) V. Capasso¶(Dip. di Matematica, Univ. di Milano) H.E. Kunze (Dept. of Mathematics and Statistics, University of Guelph, Ontario), D. La Torre (Dip. di Economia, Univ. di Milano), E.R. Vrscay (Dept. of Applied Mathematics, University of Waterloo, Ontario),
Solving inverse problems for differential equations by a "generalized collage" method and application to a mean field stochastic model, Nonlinear Analysis: Real World Applications Nonlinear Analysis: Real World Applications **15**, 276-289 (2014),
doi:10.1016/j.nonrwa.2011.05.017 .
Cit. : [28]

(35) G. G. Grahovski (Dept. of Applied Mathematics, University of Leeds), A. V. Mikhailov (Institute of Nuclear Research and Nuclear Energy, Bulgarian Academy of Sciences, Sofia),
Integrable Discretisations for a Class of Nonlinear Schrödinger Equations on Grassmann Algebras, arXiv:1303.1853v1 [nlin.SI] 7 Mar 2013
Cit.: [11]

(36) J.C. Clemente-Gallardo (BIFI-Departamento de Fýsica Teórica and Unidad Asociada IQFR-BIFI, Universidad de Zaragoza), G. Marmo (Dip. di Scienze Fisiche, Univ. Federico II, Napoli),
Tensorial description of quantum mechanics, Physica Scripta T153 (2013) 014012 (4pp). See also arXiv:1302.0194v1 [math-ph] 1 Feb 2013
Cit. : [7]

(37) Fajun Yu, Li Li (College of Maths and Systematic Science, Shenyang Normal University, Shenyang),
Continuous limits for an integrable coupling of the Kac-Van Moerbeke hierarchy, Applied Mathematics and Computation **219**, 5772-5778 (2013)
Cit.: [14]

(38) M. Rubbo¶(Dipartimento di Scienze della Terra, Università di Torino), *Basic concepts in crystal growth*, Cryst. Res. Technol., 1-30 (2013), DOI 10.1002/crat.201200702 .
Cit.: [30]

(39) S. Tao (School of Mathematics and Information Science, Shangqiu Normal University, Shangqiu), T. Xia (Dept. of Mathematics, Shanghai University, Shanghai),
Nonlinear super integrable couplings of super Broer-Kaup-Kupershmidt hierarchy and its super Hamiltonian structures, Advances in Mathematical Physics Advances in Mathematical Physics, Volume 2013, Article ID 520765, http://dx.doi.org/10.1155/2013/520765.
Cit.: [10]

(40)(41) Zhou Tong, Zhu ZuoNong, He Peng (Dept. of Mathematics, Shanghai Jiao Tong University, Shanghai),
A fifth order semidiscrete mKdV equation, Science China Mathematics **56**(1) (January 2013), 123-134, doi: 10.1007/s11425-012-4447-2
Cit.: [14] [16]

(42)(43) S. Jin (Dept. of Mathematical Sciences, University of Texas at Dallas), J. G. Staniswali (Dept. of Mathematical Sciences, University of Texas at El Paso), I. Mallawaarachchi (Dept. of Biostatistics and Epidemiology, Texas Tech University Health Science Center, El Paso)
Principal differential analysis with a continuous covariate: low-dimensional approximations for functional data, Journal of Statistical Computation and Simulation **83** (10), 1064-1980 (2013),
http://dx.doi.org/10.1080/00949655.2012.675575.
Cit. : [26] [33]

(44) V. Capasso¶(Dip. di Matematica, Università di Milano),
Randomness and Geometric Structures in Biology, in "Pattern Formation in Morphogenesis" (edited by V. Capasso, M. Gromov, A. Harel-Bellan, N. Morozova, L.L. Pritchard), Springer Proceedings in Mathematics **15** (2013), pp 283-289.
Cit. : [28]

(45) (46) (47) M. Marino (Dipartimento di Matematica, Università di Milano),
Noncommutative Integrability from Classical to Quantum Mechanics,
Acta Appl Math **120**, 237-254 (2012), doi 10.1007/s10440-012-9713-3.
Cit. : [1] [2] [3]

(48) C. Ciliberto (Dip. di Matematica, Università di Roma Tor Vergata), E. Sallent Colombo (Universitat de Bercelona, Departament de Fìsica Fonamental, Grup de Història de la Fisica),
Enrico Bompiani. The years in Bologna, a chapter of the book "Mathematicians in Bologna 1861-1960", Springer (2012).
Cit. : [17]

(49) Claudio Bartocci (Dipartimento di Matematica, Università di Genova),
Una piramide di problemi. Storie di Matematica da Hilbert a Gauss, Raffaello Cortina Editore (2012).
Cit. : [17]

(50)(51) G. Sardanashvily (Dept of Theoretical Physics, Moscow State University),
Lectures on Differential Geometry of Modules and Rings. Application to Quantum Theory, LAMBERT Academic Publishing (2012).
See also arXiv:0910.1515v1 [math-ph] 8 Oct 2009.
Cit. : [2] [3]

(52) E. Fan (Institute of Mathematics and Key Laboratory of Mathematics for Nonlinear Science, Fudan University, Shanghai), Y. C. Hon (Department of Mathematics, City University of Hong Kong),
Super extension of Bell Polynomials with Applications to Superymmetric Equations, J. Math. Phys. 53, 013503 (2012); doi: 10.1063/1.3673275 .
See also arXiv:1008.4198v1 [nlin.SI] 25 Aug 2010.
Cit.: [6]

(53) You Fu-Cai (Dept. of Basic Sciences, Shenyang Institute of Engineering, Shenyang),
Nonlinear Super Integrable Couplings of Super Dirac Hierarchy and Its Super Hamiltonian Structures, Commun. Theor. Phys. **57** (2012), 961-966
Cit.: [10]

(54) (55) (56) Wei Fu (Dept. of Mathematics, Shanghai University), Lin Huang (School of Mathematical Sciences, Fudan University, Shanghai), K.M. Tamizhmani (Dept. of Mathematics, Pondicherry University, Puducherry), Da-jun Zhang (Dept. of Mathematics, Shanghai University),
Integrable properties of the differential-difference Kadomtsev-Petviashvili hierarchy and continuum limits, arXiv:1211.3585v2 [nlin.SI] 24 Nov 2012
Cit.: [14] [15] [16]

(57) A. Izosimov (Dept. of Math. Sciences, Loughborough University),
Stability of relative equilibria of multidimensional rigid body, arXiv:1203.3985v1 [math-ph] 18 Mar 2012.
Cit. : [12]

(58) E. Villa (Dip. di Matematica, Università di Milano), P. R. Rios (Universidade Federal Fluminense, Escola de Engenharia Industrial Metalúrgica de Volta Redonda, Volta Redonda, Brasil),
On modelling recrystallizazion processes with random growth velocities of the grains in material science, Image Anal Stereol **31**, 149-162 (2012), doi:10.5566/ias.v31.p149-162
Cit.: [30]

(59) A. Panasyuk (Faculty of Mathematics and Computer Science University of Warmia and Mazury, Poland and Pidstryhach Institute for Applied Problems of Mechanics and Mathematics, NASU, Lviv, Ukraine),
Lie-Poisson pencils related to semisimple Lie algebras: towards classification, arXiv:1208.1642v1 [math.DG] 8 Aug 2012.
Cit. : [12]

(60) S. Finch (Faculty of Art and Sciences, Harvard University),
2012 Errata and Addenda to the book *Mathematical Constants* (Cambridge Univ. Press, 2003), section "Sobolev isoperimetric constants"
(available at http://www.people.fas.harvard.edu/˜sfinch/).
Cit. : [33]

(61)(62)(63) Fa-Jun Yu (College of Maths and Systematic Science, Shenyang Normal University, China),
A kind of new continuous limit of an integrable coupling system for discrete AKNS hierarchy, Int. J. Mod. Phys. B Vol. **25**(26), 3443-3454 (2011).
Cit. : [14] [15] [16]

(64)(65) G. Giachetta, L. Mangiarotti (Department of Mathematics and Informatics, Univ. of Camerino), G. Sardanashvily (Department of Theoretical Physics, Moscow University),
Geometrical Formulation of Classical and Quantum Mechanics, World Scientific (2011).
Cit. : [2] [3]

(66) G. F. Volkert (Università degli Studi di Napoli Federico II),
Quantum Information in Geometric Quantum Mechanics, PhD Thesis, Research Doctorate in Fundamental and Applied Physics, Università degli Studi di Napoli Federico II, 2011. (G. Marmo, advisor).
Available at http://www.fedoa.unina.it/8930/
Cit.: [5]

(67) G. Aletti, E. G. Bongiorno, V. Capasso¶, (Dipartimento di Matematica, Università di Milano),
Integration in a dynamical stochastic geometric framework, ESAIM: Probability and Statistics Vol. **15**, Supplement: In honor of Marc Yor, pp. 402-416 (2011), doi: http://dx.doi.org/10.1051/ps/2010009 .
Cit. : [28]

(68) Engui Fan (School of Mathematical Sciences and Key Laboratory of Mathematics for Nonlinear Science, Fudan University, Shanghai),
New Bilinear Bäcklund Transformation and Lax Pair for the Supersymmetric Two-Boson Equation, Studies in Applied Mathematics **127**, 284-301 (2011).
Cit. : [6]

(69) E. Villa (Dip. di Matematica, Università di Milano), P. R. Rios (Universidade Federal Fluminense, Escola de Engenharia Industrial Metalúrgica de Volta Redonda, Volta Redonda, Brasil),
Transformation kinetics for nucleation of random planes and lines, Image Anal Stereol **30**, 153-165 (2011), doi:10.5566/ias.v30.p153-165
Cit.: [30]

(70) G. Ordonez. (Physics and Astronomy Department, Butler University, Indianapolis), Yingyue Boretz (Center for Complex Quantum Systems, The University of Texas at Austin),
The quantum Bernoulli map, in "Perspectives of Nonequilibrium Statistical Physics-The Memory of Professor Shuichi Tasaki", Bussei Kenkyu **97**(3), 456-476, 2011-12-05. Available at http://ci.nii.ac.jp/naid/110008799115.
See also arXiv:1110.5122v1 [quant-ph] 24 Oct 2011.
Cit. : [1]

(71) (72) (73) B. Sanborn (Arizona State University), *Symplectic Topology and Geometric Quantum Mechanics*, PhD dissertation (August 2011). Available at http://repository.asu.edu/attachments/57030/content
/Sanborn_asu_0010E_10993.pdf .
Cit. : [1] [2] [3]

(74) M. V. Bartuccelli (University of Surrey, Guildford), J. D. Gibbon (Department of Mathematics, Imperial College, London),
Sharp constants in the Sobolev embedding theorem and a derivation of the Brezis-Gallouet interpolation inequality, J. Math. Phys **52**, 093706 (2011).
Cit. : [18]

(75) P. Birtea, I. Casu (Departamentul de Matematica, Universitatea de Vest din Timisoara, Romania) T.S. Ratiu, M. Turhan, (Section de Mathématiques, École Polytechnique Fédérale de Lausanne, Switzerland),
Stability of Equilibria for the so(4) Free Rigid Body, Journal of Nonlinear Science, doi 10.1007/s00332-011-9113-2 (2012).
Cit. : [12]

(76) Ioan Casu (Department of Mathematics, West University of Timisoara, Romania),
On the stability problem for the so(5) *free rigid body*, International Journal of Geometric Methods in Modern Physics **8**(6), 1205-1223 (2011). Also available as arXiv:1009.2387v1 [math.DS] 13 Sep 2010.
Cit. : [12]

(77) A. Tsiganov (St.Petersburg State University),
Integrable Euler top and nonholonomic Chaplygin ball, Journal of Geometric Mechanics **3**(3)(2011), pp. 337-362, doi:10.3934/jgm.2011.3.337 . Also available as arXiv:1002.1123v2 [nlin.SI] 7 Sep 2011.
Cit. : [12]

(78)(79) J. Krebs (Universität des Saarlandes, Naturwissenschaftlich-Technischen Fakultäten),
Lösungsmethoden und Fehlerabschätzungen für semi-diskrete inverse Probleme (Solution methods and error estimates for semi-discrete inverse problems) Dissertation, (2010).
Available at http://scidok.sulb.uni-saarland.de/volltexte/2010/3433/.
Cit. : [19] [26]

(80) Dinh Thanh Duc, Nguyen Du Vi Nhan (Department of Mathematics, Quy Nhon University, Binh Dinh Vietnam),
Generalize some norm inequalities of Saitoh, Kodai Math. J. **34**, 191-201 (2011).
Cit. : [18]

(81) Zuo-nong Zhu, Hai-qiong Zhao (Department of Mathematics, Shanghai Jiao Tong University), Xiao-nan Wu (Department of Mathematics, Hong Kong Baptist University),
On the continuous limits and integrability of a new coupled semidiscrete mKdV system, J. Math. Phys **52**, 043508 (2011).
Cit. : [14]

(82) P. Bertozzini. R. Conti (School of Mathematical and Physical Sciences, University of Newcastle, Callaghan, Australia), W. Lewkeeratiyutkul (Department of Mathematics, Chulalongkorn University, Bangkok),
A Horizontal Categorification of Gel'fand Duality, Advances in Mathematics **226**, 584-607 (2011). Also available as arXiv:0812.3601v1 [math.OA] (18 Dec 2008).
Cit. : [7]

(83) A. Abdelrazec (Dept. of Mathematics, York University, Toronto, Ontario), D.Pelinovsky (Dept. of Mathematics, McMaster University, Hamilton, Ontario),
Convergence of the Adomian Decomposition Method for Initial-Value Problems, Numer. Methods Partial Differential Eq. **27**(4), 749-766 (2011) (doi: 10.1002/num.20549).
Cit. : [26]

(84) Hai-qiong Zhao, Zuo-nong Zhu (Department of Mathematics, Shanghai Jiao Tong University),
Multi-soliton, multi-positon, multi-negaton, and multi-periodic solutions of the coupled Volterra lattice equation, Journal of Mathematical Physics **52**, 023512 (2011). Also available as arXiv:0911.3458v1 [nlin.SI] (18 Nov 2009)
Cit. : [14]

(85) J. L. Alonso, A. Castro, J. Clemente-Gallardo, J. C. Cuchy, P. Echenique, F. Falceto (Departamento de Fýsica Teórica, Universidad de Zaragoza; Departament d'Enginyeria Agroforestal, Universitat de Lleida; Instituto de Quimica Fisica "Rocasolano", Madrid)),
Statistics and Nosé formalism for Ehrenfest dynamics, J. Phys. A: Math. Theor. **44** (2011) 395004 (23pp). Also available as arXiv:1104.2154v1 [physics.chem-ph] 12 Apr 2011.
Cit. : [5]

(86) P. Aniello (Dip. di Scienze Fisiche, Università di Napoli), J. Clemente-Gallardo (Departamento de Fisica Teorica, Universidad de Zaragoza), G. Marmo, G. F. Volkert (Dip. di Scienze Fisiche, Università di Napoli),
From Geometric Quantum Mechanics to Quantum Information, arXiv:1101.0625v1 [math-ph] 3 Jan 2011.
Cit. : [5]

(87) V. Capasso¶, D. Morale (Dipartimento di Matematica, Università degli Studi di Milano),
On the Stochastic Modelling of Interacting Populations. A Multiscale Approach Leading to Hybrid Models, in "Applied and Numerical Partial Differential Equations" (edited by W. Fitzgibbon, Y.A. Kuznetsov, P. Neittaanmäki, J. Périaux and O. Pironneau), Computational Methods in Applied Sciences Volume **15**, Springer (2010), pp 59-80, doi 10.1007/978-90-481-3239-3_6 .
Cit. : [28]

(88) Alessia Di Vito, Massimo Fanfoni (Dip. di Fisica, Università di Roma Tor Vergata), Massimo Tomellini (Dip. di Scienze e Tecnologie Chimiche, Università di Roma Tor Vergata),
Stochastic transformation of points in polygons according to the Voronoi tessellation: Microstructural description, Physical Review E **82**, 061111 (2010).
Cit. : [28]

(89) R. Carroll (Mathematics Department, University of Illinois, Urbana)
On the Emergence Theme of Physics, World Scientific (2010).
Cit. : [2]

(90) E. Ercolessi (Dip. di Fisica and INFN, Università di Bologna), G. Marmo (Dip. di Scienze Fisiche and INFN, Università di Napoli) and G. Morandi (Dip. di Fisica and INFN, Università di Bologna)
From the equations of motion to the canonical commutation relations, Rivista del Nuovo Cimento **33** (8-9), 401-590 (2010) (doi 10.1393/ncr/i2010-10057-x).
Cit. : [7]

(91) E. Villa (Dip. di Matematica, Univ. di Milano),
On the specific area of inhomogeneous boolean models. Existence results and applications., Image Anal. Stereol. **29** 111-119 (2010).
Cit. : [28]

(92) T. Iwai, D, Tarama (Dept. of Applied Mathematics and Physics, Graduate School of Informatics, Kyoto University),
Classical and quantum dynamics for an extended free rigid body, Differential Geometry and its Applications **28**, 501-517 (2010) (doi:10.1016/j.difgeo.2010.05.002).
Cit. : [12]

(93) E. Luciano, C. S. Roero (Dip. di Matematica, Univ. di Torino),
La scuola di Giuseppe Peano, in: in: Peano e la sua Scuola fra matematica, logica e interlingua, C. S. Roero (Ed.) Studi e Fonti per la storia dell'Università di Torino, XVII, Deputazione Subalpina di Storia Patria, Torino (2010).
Cit. : [17]

(94) O. Ye. Hentosh (Institute for Applied Problems of Mechanics and Mathematics, National Academy of Sciences of Ukraine),
The Lax Integrable Differential-Difference Dynamical Systems on Extended Phase Spaces, Symmetry, Integrability and Geometry: Methods and Applications (SIGMA) **6** (2010), 034, 14 pages. Also available as arXiv:1004.2945v1 [nlin.SI] 17 Apr 2010.
Cit. : [13]

(95)(96)(97) M. Spera (Dipartimento di Informatica, Università di Verona),
On some hydrodynamical aspects of quantum mechanics, Central European Journal of Physics, **8**(1), 42-48 (2010) (doi: 10.2478/s11534-009-0070-4). Also available as arXiv:0902.0691v1 [math-ph] 4 Feb 2009.
Cit. : [1] [2] [3]

(98) D. Pelinovsky, A. Sakovich (Department of Mathematics, McMaster University, Hamilton, Ontario),
Global Well-Posedness of the Short-Pulse and Sine-Gordon Equations in Energy Space, Communications in Partial Differential Equations **35**, 613-629 (2010).
Cit. : [26]

(99) A. Sakovic, *Well-posedness of nonlinear wave equations in characteristic coordinates*, Thesis Submitted for the Degree of Master of Science, McMaster University (Hamilton, Ontario) (2009).
Cit. : [26]

(100) (101) G. Aletti, E. G. Bongiorno, V. Capasso ¶, (Dipartimento di Matematica, Università di Milano),
Statistical aspects of fuzzy monotone set-valued stochastic processes. Application to birth-and-growth processes, Fuzzy Sets and Systems **160**, 3140-3151 (2009). (doi:10.1016/j.fss.2008.12.011).
Cit. : [28] [30]

(102) C. X. Li (School of Mathematical Sciences, Capital Normal University, Beijing), J. J. C. Nimmo (Department of Mathematics, University of Glasgow),
Darboux transformations for a twisted derivation and quasideterminant solutions to the super KdV equation, Proc. R. Soc. Soc. A **466**, 2471-2493 (2010). Also available as arXiv:0911.1413v1 [nlin.SI] 7 Nov 2009.
Cit. : [11]

(103) M. J. Kavic,
Foundational Investigations and Astronomical Implications of Quantum Gravity, Dissertation submitted to the Faculty of the Virginia Polytechnic Institute and State University for the degree of PhD in Physics (October 12, 2009).
Cit. : [2]

(104) A. Enciso Carrasco,
Spin models of Calogero-Sutherland type and associated spin chains, Memoria de Tesis Doctoral presentada al Departamento de Fysica Teorica II para optar al grado de Doctor en Fysica, Univ. Complutense de Madrid (2007), arXiv:0906.1167v1 [math-ph] 5 Jun 2009.
Cit. : [1]

(105)(106)(107) Li Li, Fajun Yu (College of Maths and Systematic Science, Shenyang Normal University, Shenyang, China),
Continuous limits for an integrable coupling system of Toda equation hierarchy, Physics Letters A **373**, 3501-3506 (2009).
Cit. : [14] [15] [16]

(108)(109) O.E. Hentosh (Ukrainian Natl. Acad. Sci, Inst. Appl. Problems Mech. and Math., Lvov, Ukraine)
Lax-Integrable Lagerge-Mathieu hierarchy of supersymmetric nonlinear dynamical systems and its finite-dimensional reduction of Neumann type, Ukrainian Mathematical Journal **61**(7), 1075-1092 (2009). Translated from Ukrainskyi Matematychnyi Zhurnal **61** (7), 906-921, July 2009.
Cit. : [6] [8]

(110) V. Capasso[¶], D. Morale (Dipartimento di Matematica, Università degli Studi di Milano),
Stochastic modelling of tumour-induced angiogenesis,
J. Math. Biol. **58**, 219-233 (2009), doi 10.1007/s00285-008-0193-z .
Cit. : [28]

(111)(112) D. Chruscinski (Institute of Physics, Nicolaus Copernicus University, Torun, Poland), Giuseppe Marmo (Dipartimento di Scienze Fisiche, Università "Federico II" di Napoli e Istituto Nazionale di Fisica Nucleare),
Remarks on the GNS Representation and the Geometry of Quantum States, Open Systems and Information Dynamics **16**(2-3), 157-177 (2009). Also available as arXiv:0810.1660v1 [math-ph] 9 Oct 2008.
Cit. : [2] [7]

(113) A. Bloch (Dept of Mathematics, Univ. of Michigan, Ann Arbor), V. Brinzanescu (Dept. of Mathematics and Informatics, Univ. of Pitesti, Romania) A. Iserles (Dept. of Applied Mathematics and Theoretical Physics, University of Cambridge, UK), J.E. Marsden (Control Theory and Dynamical Systems, California Institute of Technology, Pasadena), T.S. Ratiu (Section de Mathématique, Ecole Polytechnique Fédéral de Lausanne),
A class of integrable flows on the space of symmetric matrices, Commun. Math. Phys. **290**, 399-435 (2009)
Cit. : [12]

(114) J.C. Clemente-Gallardo (Inst. de Biocomputación y Fýsica de los Sistemas Complejos, Univ. de Zaragoza), G. Marmo (Dip. di Scienze Fisiche, Univ. Federico II, Napoli),
Towards a definition of quantum integrability, International Journal of Geometric Methods in Modern Physics **6**(1), 129-172 (2009). Also available as arXiv:0808.3819v1 [quant-ph] 28 Aug 2008.
Cit. : [7]

(115) A. Panasyuk (Division of Mathematical Methods in Physics, University of Warsaw),
Bi-Hamiltonian structures with symmetries, Lie pencils and integrable systems, J. Phys. A: Math. Theor. 42 (2009) 165205 (20pp).
Cit. : [12]

(116)(117)(118) Fajun Yu, Li Li (College of Maths and Systematic Science, Shenyang Normal University, Shenyang, China)
An integrable coupling system of lattice hierarchy and its continuous limits, Physics Letters A **373** 1540-1545 (2009).
Cit. : [14] [15] [16]

(119) (120) A. C. T. Gustavsson (Blackett Laboratory, Imperial College London),
Constrained quantum dynamics, Journal of Physics: Conference Series **174** (2009) 012025; based on the talk presented at the Fourth International Workshop on Decoherence, Information, Complexity and Entropy-DICE2008 (Castiglioncello, September 22-26, 2008; L. Diósi, H.T. Elze, L. Fronzoni, J. Halliwell, G. Vitiello, Editors).
Also available as arXiv:0903.5437v1 [quant-ph] 31 Mar 2009.
Cit. : [2][3]

(121) **(122)** D. C. Brody (Dept. of Mathematics, Imperial College London) A. C. T. Gustavsson (Blackett Laboratory, Imperial College London), and L. P. Hughston (Dept. of Mathematics, Imperial College London)
Metric approach to quantum constraints, J. Phys. A: Math. Theor. **42** (2009) 295303 (12pp). Also available as arXiv:0903.5261v1 [quant-ph] 30 Mar 2009.
Cit. : [2][3]

(123) P.R. Rios (Universidade Federal Fluminense, Escola de Engenharia Industrial Metalúrgica, Volta Redonda, RJ, Brazil), E. Villa (Dipartimento di Matematica, Università di Milano),
Transformation kinetics for inhomogeneous nucleation, Acta Materialia **57**, 1199-1208 (2009).
Cit. : [28]

(124) Sandra Linguerri, Raffaella Simili (Dipartimento di Filosofia, Univ. di Bologna) (a cura di),
Einstein parla italiano. Itinerari e polemiche, Edizioni Pendragon, 2008 ISBN 8883425308, 9788883425301.
Cit. : [17]

(125) **(126)** V.S. Gerdjikov (Institute of Nuclear Research and Nuclear Energy, Bulgarian Academy of Sciences, Sofia) G. Vilasi (Dipartimento di Scienze Fisiche Universita di Salerno), A.B. Yanovski (Department of Mathematics and Applied Mathematics, University of Cape Town, South Africa)
Integrable Hamiltonian Hierarchies: Spectral and Geometric Methods, Lecture Notes in Physics 748, Springer (2008).
Cit. : [1] [12]

(127) Engui Fan (School of Mathematical Sciences and Key Laboratory of Mathematics for Nonlinear Science, Fudan University, Shanghai)
A lattice hierarchy and its continuous limits, Physics Letters A, doi:10.1016/j.physleta.2008.08.052 (2008).
Cit. :[14]

(128) (129) V. Capasso [¶], (Dipartimento di Matematica, Università di Milano),
On the Stochastic Geometry of Birth-and-Growth Processes. Application to Material Science, Biology and Medicine, in "Modeling, Simulation and Optimization of Complex Processes", Proceedings of the 3rd International Conference on High Performance Scientific Computing, (Hanoi, March 6-10, 2006), Springer (2008) pp. 131-161.
Cit. : [28]

(130)(131)(132) J.C. Clemente-Gallardo (Inst. de Biocomputación y Física de los Sistemas Complejos, Univ. de Zaragoza), G. Marmo (Dip. di Scienze Fisiche, Univ. Federico II, Napoli),
Basis of quantum mechanics, geometrization and some applications to quantum information, International Journal of Geometric Methods in Modern Physics Vol. **5**(6) 989-1032 (2008). Also available as arXiv:0806.4701v1 [quant-ph] 28 Jun 2008.
Cit. : [2] [5] [7]

(133)(134) M. Hohmann, R. Punzi, M. N.R. Wohlfarth (Zentrum für Mathematische Physik und II. Institut für Theoretische Physik, Universität Hamburg)
Quantum manifolds with classical limit, arXiv:0809.3111v1 [math-ph] 18 Sep 2008.
Cit. :[2] [3]

(135) (136) D. C. Brody (Dept. of Mathematics, Imperial College London) A. C. T. Gustavsson (Blackett Laboratory, Imperial College London), and L. P. Hughston (Dept. of Mathematics, Imperial College London)
Symplectic approach to quantum constraints, J. Phys. A: Math. Theor. **41** (2008) 475301 (11pp). Also available as arXiv:0808.1068v1 [quant-ph] 7 Aug 2008.
Cit. : [2] [3]

(137) V. Capasso[¶], A. Micheletti[¶], (Dipartimento di Matematica, Università degli Studi di Milano and CIMAB), E. Dejana (Dipartimento di Scienze Biomolecolari e Biotecnologie, Università degli Studi di Milano and IFOM)
Methods of Stochastic Geometry and Related Statistical Problems in the Analysis and Therapy of Tumour Growth and Tumour Driven Angiogenesis, in "Selected Topics in Cancer Modeling", Birkhäuser (2008), pp. 1-37, doi 10.1007/978-0-8176-4713-1_12 .
Cit. : [28]

(138) V. Capasso[¶], A. Micheletti[¶], D. Morale (Dipartimento di Matematica, Università degli Studi di Milano and CIMAB),
Stochastic geometric models, and related statistical issues in tumour-induced angiogenesis, Mathematical Biosciences **214**, 20-31 (2008).
Cit. : [28]

(139) V. Capasso[¶](Dip. di Matematica, Univ. di Milano), H.W. Engl (Austrian Academy of Sciences, John Radon Inst. of Appl. and Comp. Math.), S. Kindermann (Univ. of Linz, Inst. Ind. Math.)
Parameter identificaztion in a random environment exemplified by a multiscale model for crystal growth, Multiscale Modelig and Simulation **7**(2), 814-841 (2008), doi: 10.1137/070704423
Cit. : [28]

(140) J. Lenells (Department of Applied Mathematics and Theoretical Physics, University of Cambridge, Cambridge),
A Bi-Hamiltonian Supersymmetric Geodesic Equation, Lett. Math. Phys **85**, 55-63 (2008)
Cit. : [8]

(141) (142) Wen-Xiu Ma (Dept. of Mathematics and Statistics, University of South Florida, Tampa), Jing-Song He (Dept. of Mathematics, University of Science and Technology of China, Hefei) Zhen-Yun Qin (School of Mathematical Sciences, Fudan University, Shanghai),
A supertrace identity and its applications to superintegrable systems, Journal of Mathematical Physics **49**, 033511 (2008).
Cit. : [6] [11]

(143) W. Stulpe (Aachen University of Applied Sciences, Jülich, Germany) Paul Busch, (Department of Mathematics, University of York, United Kingdom),
The structure of classical extensions of quantum probability theory,
Journal of Mathematical Physics **49**, 032104 (2008). Also available as arXiv:0708.1539v1 [quant-ph] 11 Aug 2007.
Cit. : [2]

(144) P. Bertozzini. R. Conti (Department of Mathematics and Statistics, Thammasat University, Bangkok), W. Lewkeeratiyutkul (Department of Mathematics, Chulalongkorn University, Bangkok),
Non-Commutative Geometry, Categories and Quantum Physics, Contributions in Mathematics and Applications II, East-West Journal of Mathematics, Special Volume 2007, 213-259 (2008) (Preproceedings of the International Conference on Mathematics and Its Applications, ICMA-MU 2007, Bangkok, Thailand, August 15-17, 2007, Mahidol University, 135-178 (2007)). Also available as arXiv:0801.2826v1 [math.OA] 18 Jan 2008.
Cit. : [7]

(145) E. Villa (Dip. di Matematica, Univ. di Milano),
A note on mean volume and surface densities for a class of birth-and-growth stochastic processes, Int. J. Contemp. Math. Sciences, **3** (23), 1141 - 1155 (2008). Also available as arXiv:0710.2751v2 [math.PR] 6 May 2008.
Cit. : [28]

(146) (147) (148) (149) J. Cariñena (Dep. de Fisica Teórica, Univ. de Zaragoza), J.C. Clemente-Gallardo (Inst. de Biocomputación y Fýsica de los Sistemas Complejos, Univ. de Zaragoza), G. Marmo (Dip. di Scienze Fisiche, Univ. Federico II, Napoli),
Reduction Procedures in Classical and Quantum Mechanics, International Journal of Geometric Methods in Modern Physics **4** (8) 1363-1403 (2007).
Cit. : [2] [3] [5] [7]

(150) V. Jejjala (Department of Mathematical Sciences, Durham University, UK), M. Kavic, D. Minic (Institute for Particle, Nuclear and Astronomical Sciences, Department of Physics, Virginia Tech)
Time and M-theory, International Journal of Modern Physics A **22** (20), 3317-3405 (2007).
Cit. : [2]

(151) (152) (153) R. Carroll (Mathematics Department, University of Illinois, Urbana)
On the Quantum Potential, Arima Publishing (2007).
Cit. : [1] [2] [3]

(154) (155) N.P. Landsman (Institute for Mathematics, Astrophysics and Particle Physics, Universiteit Nijmegen)
Between classical and quantum, Handbook of the Philosophy of Science, Vol. 2: Philosophy of Physics (eds. J. Butterfield and J. Earman), Part A, pp. 417-553 (Elsevier, Amsterdam, 2007). Also available as arXiv:quant-ph/0506082.
Cit. : [2] [3]

(156) (157) W. Stulpe (Aachen University of Applied Sciences, Jülich, Germany),
Topologies and Measurable Structures on the Projective Hilbert Space,
arXiv:0708.1208v1 [math-ph] 9 Aug 2007.
Cit. : [2] [3]

(158) C. Andrà, L. Degiovanni, G. Magnano (Dipartimento di Matematica, Univ. di Torino),
A trihamiltonian extension of the Toda lattice, Journal of Geometry and Physics **57**, 863-880 (2007).
Also available as arXiv:nlin.SI/0512067 (2005).
Cit. : [13]

(159) (160) D. W. Hook (Theoretical Physics, Imperial College)
Phase Transitions in Quantum Microcanonical Equilibrium, Thesis presented for the degree of Doctor of Philosophy of the University of London and for the Diploma of Imperial College (July 2007). Available at
http://www3.imperial.ac.uk/people/d.hook/publications.
Cit. : [2] [3]

(161) P.E. Lammert (Department of Physics, Pennsylvania State University),
Differentiability of Lieb Functional in Electronic Density Functional Theory,
International Journal of Quantum Chemistry **107**, 1943-1953 (2007).
Cit. : [26]

(162) E. Sallent (Univ. di Barcelona)
L'Espaces Courbes. Critique de la Relativité (1924) di C. Burali-Forti e T. Boggio, Joint Meeting, Société Francaise d'Histoire des Sciences et des Techniques- Società Italiana di Storia delle Matematiche,
(Paris, Institut Poincaré, Octobre 2007; proceedings available at
http://www.dm.unito.it/sism/parigi/sunti.pdf).
Cit. : [17]

(163) (164) J.C. Clemente-Gallardo (BIFI, Univ. de Zaragoza), G. Marmo (Dip. di Scienze Fisiche, Univ. Federico II, Napoli),
The space of density states in Geometrical Quantum Mechanics, (capitolo del libro "Differential Geometric Methods in Mechanics and Field Theory", Volume in Honour of Willy Sarlet, Eds. F. Cantrijn, M. Crampin and B. Langerock, Gent Academia Press 2007, pag. 35-56). Also available as arXiv:0707.3759v1 [quant-ph] 25 Jul 2007.
Cit. : [2] [3]

(165) (166) J. Cariñena, J.C. Clemente-Gallardo (Dep. de Fisica Teórica e BIFI, Univ. de Zaragoza), G. Marmo (Dip. di Scienze Fisiche, Univ. Federico II, Napoli),
Introduction to Quantum Mechanics and the Quantum-Classical Transition. Proceedings of the XV International Workshop on Geometry and Physics Puerto de la Cruz, Tenerife, Canary Islands, Spain (September 11-16, 2006). Publ. de la RSME **11** (2007), 3-42. Also available as arXiv:0707.3539v1 [quant-ph] 24 Jul 2007.
Cit. : [2] [3]

(167) R.B. Paris (Division of Complex Systems, University of Abertay Dundee, Dundee, UK),
On the use of Hadamard expansions in hyperasymptotic evaluation of Laplace-type integrals-III: Clusters of saddle points, Journal of Computational and Applied Mathematics **207** 273-290 (2007).
Cit. : [22]

(168) R.B. Paris (Division of Complex Systems, University of Abertay Dundee, Dundee, UK),
On the use of Hadamard expansions in hyperasymptotic evaluation of Laplace-type integrals-IV: Poles, Journal of Computational and Applied Mathematics **206**, 454-472 (2007)
Cit. : [22]

(169) V. Capasso[¶], E. Villa (Dip. di Matematica, Università di Milano),
On the Evolution Equations of Mean Geometric Densities for a Class of Space and Time Inhomogeneous Stochastic Birth-and-growth Processes, in "Stochastic Geometry", Lecture Notes in Mathematics **1892**, pp 267-281 (2007).
Cit. : [28]

(170) D. L. Rapoport (Department of Sciences and Technology, Universidad Nacional de Quilmes, Buenos Aires),
Torsion Fields, Cartan-Weyl Space-Time and State-Space Quantum Geometries, their Brownian Motions, and the Time Variables, Foundations of Physics **37** (4/5) 813-854 (2007).
Cit. : [2]

(171) P. Leifer (Cathedra of Informatics, Crimea State Engineering and Pedagogical University, Crimea, Ukraine)
Objective quantum theory based on the $CP(N-1)$ affine gauge fields, Annales de la Fondation Louis de Broglie, **32**(1), 25-50 (2007).
See also arXiv:physics/0612249v1 28 Dec 2006.
Cit. : [5]

(172) Gregorio Falqui (Dipartimento di Matematica e Applicazioni, Universit'a di Milano - Bicocca),
A note on the rotationally symmetric $SO(4)$ Euler rigid body, SIGMA (Symmetry Integrability Geom. Methods Appl.) **3** (2007), Paper 032, 13 pp. (electronic). Also available as arXiv:math-ph/0611045 18 Nov 2006.
Cit. : [12]

(173) G. Marmo, A. Simoni, F. Ventriglia (Dip. di Scienze Fisiche, Univ. Federico II, Napoli),
Geometrical Structures emerging from Quantum Mechanics, Monografýas de la Real Academia de Ciencias de Zaragoza **29**, 161-172. (2006)
Cit. : [1] [5]

(174) P. Leifer (Crimea State Engineering and Pedagogical University, Crimea, Ukraine), L.P.Horwitz, (aBar-Ilan University, Ramat-Gan, Israel; School of Physics and Astronomy, Tel-Aviv University),
Field Equations of the CP(N-1) Affine Gauge Theory, arXiv:gr-qc/0505051v2 25 Jul 2006.
Cit. : [5]

(175) V.A. Fateev (Laboratoire de Physique Theorique, Montpellier, e Laundau Institute for Theoretical Physics, Chernogolovka), S.L. Lukyanov (Rutgers University, Piscataway, NJ e Laundau Institute),
Boundary RG flow associated with the AKNS soliton hierarchy, J. Phys. A: Math. Gen. **39**, 12889-12925 (2006). Also available as arXiv:hep-th/0510271.
Cit. : [25]

(176) D. Chruśhiński (Institute of Physics, Nicolas Copernicus University, Toruń, Poland),
Geometric aspects of quantum mechanics and quantum entanglement, Symmetry and Structural Properties of Condensed Matter (SSPCM 2005): Proceedings of the Eigthh Internatial School on Theoretical Physics (31 August-7 September 2005, Myczkowce, Poland) Journal of Physics: Conference Series **30**, 9-16 (2006).
Cit. : [2]

(177) (178) (179) R. Carroll (Mathematics Department, University of Illinois, Urbana)
Fluctuations, Information, Gravity and the Quantum Potential, Springer, Book Series "Fundamental Theories of Physics" (2006).
Cit. : [1] [2] [3]

(180) T. S. Ratiu (Section de Mathématiques and Bernoulli Center, Ecole Polytechnique Fédérale de Lausanne, Switzerland),
Integrable flows on the symplectic group, talk given at Luminy, Centre International de Rencontres Mathèmatiques, Rencontre "Intégrabilité dynamique" (November 27-December 1, 2006). (Program and text of the talk available at http://www.cirm.univ-mrs.fr/videos/2006/programmes/conf32 _Ortega.html).
Cit. : [12]

(181) V. Capasso¶, A. Micheletti¶, (Dipartimento di Matematica, Università degli Studi di Milano), *Stochastic geometry and related statistical problems in biomedicine*, in "Complex Systems in Biomedicine" (Editors: A. Quarteroni, L. Formaggia, A. Veneziani), Springer (2006), pp. 35-69, doi 10.1007/88-470-0396-2.
Cit. : [28]

(182) H. Boualem, R. Brouzet (Univ. Montpellier 2),
Bi-Hamiltonian systems of deformation type, J. Geom. Phys. **56**, 1370-1386 (2006).
Cit. : [12]

(183) M. Skulimovski, (Department of Theoretical Physics, University of Lodz, Poland), *Geometric POV-measures, Pseudo-Kählerian functions and time*, in "Topics in Mathematical Physics, General Relativity and Cosmology, in honor of Jerzy Plebanski", Proceedings of 2002 International Conference, Cinvestav, Mexico City, 17-20 September 2002 (World Scientific, 2006).
Cit. : [2]

(184) A. Panasyuk (Division of Mathematical Methods in Physics, University of Warsaw),
Algebraic Nijenhuis operators and Kronecker Poisson pencils, Differential Geometry and its Applications **24**, 482-491 (2006).
Cit. : [12]

(185) (186) (187) A. Benvegnù (Dip. di Matematica, Univ. di Ferrara), M. Spera (Dip. di Metodi e Modelli Matematici per le Scienze Applicate, Univ. di Padova),
On uncertainty, braiding and entanglement in geometric quantum mechanics, Rev. Math. Phys. **18**(10), 1075-1102 (2006).
Cit. : [1] [2] [3]

(188) A. Enciso, D. Peralta-Salas (Departamento de Fisica Teorica, Universidad Complutense, Madrid)
Classical and quantum integrability of Hamiltonians without scattering states, Theoretical and Mathematical Physics **148** (2), 1086-1099 (2006).
Cit. : [1]

(189) B. Kolev (Universitè de Provence),
Morphologie des homéomorphismes des surfaces et Méthodes géométriques en hydrodynamique,
Mémoire présenté en vue de l'obtention de l'habilitation à Diriger des Recherches (Soutenance le 8 juin 2006 devant le jury composé de : A. Constantin, P. Donato, T. Kappeler, J. Los, D. Sattinger, A. Teleman).
Cit. : [12]

(190) M. Siddiq, M. Hassan, U. Saleem, (Department of Physics, Univ. of the Punjab, Pakistan)
On Darboux transformation of the supersymmetric sine-Gordon equation, J. Phys. A: Math. Gen. **39**, 7313-7318 (2006).
Cit. : [11]

(191) (192) (193) M.A. Castagnino (Institute of Astronomy and Physics of Space, Univ. of Buenos Aires), A.R. Ordonez, D.B. Emmanuele (Fac. de Ciencias Exactas, Univ. Nac. de Rosario)
A general mathematical structure for the time reversal operator,
Univ. Nac. de Rosario, Matematicae Notae (Boletin del Instituto di Matematica "Beppo Levi") XLIV, 65-80 (2006), ISSN 025-553X; also available on arXiv:quant-ph/0103132 23 March 2001.
Cit. : [2] [3] [5]

(194) E. Villa (Dip. di Matematica, Università di Milano),
Methods of geometric measure theory in stochastic geometry, Tesi di Dottorato, Dottorato di Ricerca in Matematica, XIX Ciclo Università degli Studi di Milano (2006).
Cit. : [28]

(195) (196) (197) R. Carroll (Mathematics Department, University of Illinois, Urbana)
Fluctuations, gravity, and the quantum potential, capitolo del libro "Trends in Quantum Gravity Research" (D.C. Moore, Editor), Nova Publishers, (2006) ISBN 1594546703, 9781594546709. Also available as arXiv:quant-ph/0501045 13 January 2005.
Cit. : [1] [2] [3]

(198) A. Bloch (Dept of Mathematics, Univ. of Michigan, Ann Arbor), A. Iserles (Dept. of Applied Mathematics and Theoretical Physics, University of Cambridge, UK), J.E. Marsden (Control Theory and Dynamical Systems, California Institute of Technology, Pasadena), T.S. Ratiu (Section de Mathématique, Ecole Polytechnique Fédéral de Lausanne),
A class of integrable geodesic flows on the symplectic group, arXiv:math-ph/0512093 30 December 2005.
Cit. : [12]

(199) C. S. Roero (Dip. di Matematica, Univ. di Torino),
Giuseppe Peano: il carisma di un matematico, Annali del Centro Pannunzio, Torino, Anno XXXVI - 2005/06, pp. 221-246
Cit.: [17]

(200) Angelo Guerraggio (Univ. Bocconi, Milano), Pietro Nastasi (Dipartimento di Matematica, Università di Palermo),
Matematica in camicia nera. Il regime e gli scienziati, Ed. Bruno Mondadori (2005).
Cit. : [17]

(201) Angelo Guerraggio (Univ. Bocconi, Milano), Pietro Nastasi (Dipartimento di Matematica, Università di Palermo),
Italian mathematics between the two World Wars, Science Networks. Historical Studies 29, Birkhäuser Verlag, Basel (2005).
Cit. : [17]

(202) (203) F. Treves (Mathematics Department, Rutgers University, NJ),
Bäcklund algebra and the KdV hierarchy (Leonardo da Vinci Lecture, April 26, 2004), Milan Journal of Mathematics **73**, 75-102 (2005).
Cit. : [24] [25]

(204) Yoshinori Kametaka (Graduate school of Mathematical Sciences, Faculty of Engineering Sciences, Osaka University), Kohtaro Watanabe (Dept. of Computer Science, National Defense Academy, Japan), Atsushi Nagai (College of Industrial Technology, Nihon University),
The best constant of Sobolev inequality in an n-dimensional Euclidean space, Proc. Japan Acad. **81** (Ser. A), 57-60 (2005).
Cit. : [18]

(205) Y. Kametaka (Dept. of Mathematics, Faculty of Engineering Science, Osaka University), K. Watanabe (Dept. of Computer Science, National Defense Academy, Yokosuka) , A. Nagai (College of Industrial Technology, Nihon University, Narashino), S. Pyatkov (Sobolev Institute of Mathematics, Siberian Branch of the Russian Academy of Sciences, Novosibirsk),
The best constant of Sobolev inequality in an n dimensional Euclidean space, Scientiae Mathematicae Japonica **61**(1), 15-23 (2005).
Cit. : [18]

(206) (207) D.C. Brody, D.W. Hook (Blackett Laboratory, Imperial College, London), L.P. Hughston (Department of Mathematics, King's College, London)
Microcanonical distributions for quantum systems, arXiv:quant-ph/0506163 20 June 2005.
Cit. : [2] [3]

(208) (209) V.I. Manko (Lebedev Physical Institute, Moscow) G. Marmo, F.Zaccaria (Dip. di Fisica, Univ. di Napoli), E.C.G. Sudarshan, (Dept. of Physics, Center for Particle Physics, Univ. of Texas),
Differential geometry of density states, Reports on Math. Phys. **55**(3), 405-422 (2005).
Cit. : [2] [3]

(210) (211) J. Grabowsky (Polish Academy of Sciences, Institute of Mathematics), M. Kus (Polish Academy of Sciences, Center for Theoretical Physics), G. Marmo (Dip. di Scienze Fisiche, Università Federico II, Napoli)
Geometry of quantum systems: density states and entanglement, J. Phys. A: Math. Gen. **38** 10217-10244 (2005).
Cit. : [2] [3]

(212) (213) G. Marmo (Dip. di Scienze Fisiche, Università Federico II, Napoli) G. Scolarici (Dip. di Fisica, Università di Napoli),
The quantum-classical transition: the fate of the complex structure, International Journal of Geometric Methods in Modern Physics **2**(1), 127-145 (2005).
Cit. : [2] [3]

(214) (215) (216) G. Giachetta, L. Mangiarotti (Department of Mathematics and Informatics, Univ. of Camerino), G. Sardanashvily (Department of Theoretical Physics, Moscow University),
Geometric and Algebraic Topological Metods in Quantum mechanics, World Scientific (2005).
Cit. : [2] [3] [7] (see especially Sect. 4.2 of the book, which is an exposition of these works)

(217) G. Sardanashvily (Department of Theoretical Physics, Moscow University), G. Giachetta, (Department of Mathematics and Informatics, Univ. of Camerino),
Preface: What is Geometry in Quantum Theory, International Journal of Geometric Methods in Modern Physics **1**(1-2), 1-22 (2004).
Cit. : [7]

(218) J.A. Zimmerman (Toronto),
Optimal control of the sphere S^n rolling on E^n, Math. Control Signal Systems **17**, 14-37 (2005).
Cit. : [12]

(219)(220) I. Bjelakovic (Institute of Mathematics, Technische Univ. Berlin), W. Stulpe (Aachen Univ. of Applied Sciences) ,
The projective Hilbert space as a classical phase space for non relativistic quantum dynamics, Int. J. Theor. Phys. **44**(11), 2041-2049 (2005).
Cit. : [2][3]

(221) M. Ziegler, B. Fuchssteiner (Univ. of Paderborn, Germany),
Nonlinear reformulation of Heisenberg's dynamics, Int. J. Theor. Phys. **44**(7), 693-717 (2005).
Cit. : [1]

(222) M. Siddiq, M. Hassan (Department of Physics, Univ. of the Punjab, Pakistan)
On the linearization of the super sine-Gordon equation, Europhysics Letters **70**(2), 149-154 (2005).
Cit. : [11]

(223) M. Siddiq, M. Hassan (Department of Physics, Univ. of the Punjab, Pakistan)
From Bäcklund transformations to a linear system of sine-Gordon theory in superspace, Chin. Phys. Lett. **22**(7), 1567-69 (2005).
Cit. : [11]

(224) Erhard Scholz (Dept. of Mathematics and Natural Sciences, Wuppertal University),
History of Differential Geometry, Course held in the Second semester of the UNESCO Chair, History of Mathematics, Tunis (2004).
Cit. : [17]

(225) F. Minazzi (Facoltà di Lettere e Filosofia, Univ. di Lecce)
Contestare e creare. La lezione epistemologico-civile di Ludovico Geymonat, Ed. La Città del Sole (2004).
Cit. : [17]

(226)(227) T.R. Field (Quinetiq, Malvern Technology Park, Malvern, UK), J. Anandan (Dept. of Physics and Astronomy, Univ. of South Carolina e Clarendon Laboratory, University of Oxford),
Geometric phases and coherent states, Journal of Geometry and Physics **50**, 56-78 (2004).
Cit. : [2] [3]

(228)(229) D. Chruśhiński, A. Jamiolkovski (Dept. of Mathematics, Nicolas Copernicus University, Toruń, Poland)
Geometric phases in classical and quantum mechanics, Birkhäuser, Boston (2004).
Cit. : [2] [3]

(230)(231)(232) A. Benvegnu, N. Sansonetto (Dip. di Matematica Pura e Applicata, Univ. di Padova) M. Spera (Dip. di Metodi e Modelli Matematici per le Scienze Applicate, Univ. di Padova),
Remarks on geometric quantum mechanics, J. Geom. Phys. **51** 229-243 (2004).
Cit. : [1] [2] [3]

(233)(234)(235) R. Carroll (Mathematics Department, University of Illinois, Urbana)
Information, quantum mechanics and gravity, Foundations of Physics **35**(1), 131-154 (2004).
Cit. : [1] [2] [3]

(236) Y. Ben-Aryeh (Physics Department, Israel Institute of Technology, Haifa)
Berry and Pancharatnam topological phases of atomic and optical systems, J. Opt. B: Quantum Semiclass. Opt. **6**, R1-R18 (2004).
Cit. : [5].

(237)(238)(239) R. Carroll (Mathematics Department, University of Illinois, Urbana)
Fisher, Kähler, Weyl and the quantum potential, arXiv:quant-ph/0406203 28 June 2004.
Cit. : [1] [2] [3]

(240) V. Jejjala, D. Minic, Chia-Hsiung Tze (Institute for Particle Physics and Astrophysics, Physics Department, Virginia Tech), *Towards a background independent quantum theory of gravity*, Int. J. Mod. Phys. D **13** (10), 2307-2313 (2004).
Cit. : [2]

(241) D. Minic, Chia-Hsiung Tze (Institute for Particle Physics and Astrophysics, Physics Department, Virginia Tech),
A general theory of quantum relativity, Phys. Lett. B **581** (1-2), 111-118 (2004).
Cit. : [2]

(242) (243) D. Minic, Chia-Hsiung Tze, (Institute for Particle Physics and Astrophysics, Physics Department, Virginia Tech),
What is quantum theory of gravity?, arXiv:hep-th/0401028 (6 January 2004).
Cit. : [2] [3]

(244) L.A. Dickey (University of Oklahoma),
On the Treves criterion for the Boussinesq and other GD hierarchies,
arXiv:nlin.SI/0407016 7 June 2004.
Cit. : [24]

(245) A. Enciso, D. Peralta-Salas (Departamento de Fisica Teorica, Universidad Complutense, Madrid)
On quantum integrability and Hamiltonians with pure point spectrum,
arXiv:quanth-ph/0406022 6 July 2004.
Cit. : [1]

(246) (247) (248) (249) (250) Y.B. Suris (Institut für Mathematik, Technische Universität, Berlin),
The problem of integrable discretization: Hamiltonian approach, Progress in Mathematics 219, Birkhäuser Verlag, Basel, 2003.
Cit. : [10] [13] [14] [15] [16]

(251) Kohtaro Watanabe, Takeo Yamada (Dept. of Computer Science, National Defense Academy, Japan), Wataru Takahashi (Dept. of Mathematical and Computing Science, Tokyo Institute of Technology),
Reproducing kernels of $H^m(a,b)$ $m = 1, 2, 3$ and lest constant in Sobolev's inequalities, Appl. Anal **82**(8), 809-820 (2003).
Cit. : [18]

(252) (253) (254) (255) R. Cirelli¶, M. Gatti, A. Manià¶(Dipartimento di Fisica, Università di Milano and INFN),
The pure state space of quantum mechanics as Hermitian symmetric space, Journal of Geometry and Physics **45**, 267-284 (2003).
Cit. : [2] [3] [5] [7]

(256) D. Minic, Chia-Hsiung Tze (Institute for Particle Physics and Astrophysics, Physics Department, Virginia Tech),
Background independent quantum mechanics and gravity, Physical Review D **68** (6), article 061501(R) (2003).
Cit. : [2]

(257) K. Kawamura (Research Institute for Mathematical Sciences, Kyoto Univ.),
Serre-Swan theorem for non commutative C^*-algebras, Journal of Geometry and Physics **48**, 275-296 (2003).
Cit. : [7]

(258) E. Joos, H.D. Zeh (Univ. Heidelberg), C. Kiefer (Univ. Köln), D. Giulini (Univ. Freiburg), J.Kupsch (Univ. Kaiserslautern), I.-O. Stamatescu (Univ. Heidelberg),
Decoherence and the appearence of a classical world in quantum theory, 2nd Edition, Springer (2003).
Cit. : [2]

(259) R.V. Mendes (Univ. Lisbon) V.I. Manko (Lebedev Phys. Inst., Moscow),
Quantum control and the Strocchi map, Phys. Rev. A **67**, art.no. 053404 (2003).
Cit. : [2]

(260) I. Antoniou (Int. Solvay Inst. for Phys. and Chem; Aristoteles Univ. Thessaloniki, Dep. Math.), E. Karpov (Int. Solvay Inst.); G. Pronko (Int. Solvay Inst.; Protvino High Energy Phys. Inst.)
Non locality and quantum nanostructures, Chaos Solitons and Fractals **17**, 277-281 (2003).
Cit. : [2]

(261) (262) J.M. Isidro (Inst. de Física Corpuscolar, Univ. Valencia)
Duality, quantum mechanics and (almost) complex manifolds, Modern Physics Letters A **18**, 1975-1990 (2003).
Cit. : [2] [3]

(263) G. Falqui (SISSA, Trieste), M. Pedroni (Dip. di Matematica, Univ. di Genova)
Separation of variables for bi-Hamiltonian systems, Math. Phys. Anal. Geom. **6**, 139-179 (2003).
Cit. : [13]

(264) P.A. Damianou (Dep. of Math. and Stat., Univ. Cyprus),
The negative Toda hyerarchy and rational Poisson brackets, J. Geom. Phys. **45**, 184-202 (2003).
Cit. : [13]

(265) V. Sciacca (Dipartimento di Matematica e Applicazioni, Univ. di Palermo),
Discrete KP equation amd Momentum Mapping of Toda System, (Symmetries and Integrability of Difference Equations (SIDE V), Proceedings, Edited by F.W. Nijhoff, Yu. Suris and C. Viallet), Journal of Nonlinear Mathematical Physics **10**, Supplement 2, 209-222 (2003).
Cit. : [13]

(266) E. Sallent (Univ. di Barcelona),
Cesare Burali-Forti : contributi alla teoria delle omografie vettoriali, Terzo Congresso della Società Italiana di Storia delle Matematiche (Milano, Settembre 2003; proceedings available at http://www.dm.unito.it/sism/IIIcongresso/index.html).
Cit. : [17]

(267)(268) D. C. Brody (Imperial College, London), L. P. Hughston (King's College, London),
Stochastic reduction in nonlinear quantum mechanics, Royal Society of London. Proceedings, Series A **458**, no. 2021, 1117-1127 (2002).
Cit. : [2][3]

(269)(270) M. Czachor (Politechnika Gdańsk, Poland), H.D. Doebner (Dept. of Physics, Technical University of Clausthal, Germany),
Correlation experiments in nonlinear quantum mechanics, Phys. Lett. A **301** (3-4), 139-152 (2002).
Cit. : [2][3]

(271) S. Ruijsenaars (Center for Math. and Comp. Sciences, Amsterdam),
A non local Kac-van Moerbeke equation admitting N-soliton solutions, Proceedings of the Special Session on Integrable Systems, First Joint Meeting of the Amer. Math. Soc. and the Hong-Kong Math. Soc., J. Nonlinear Math. Phys. **9** (Suppl.), 192-206 (2002).
Cit. : [14]

(272) (273) (274) R.L. Lin (Dept. of Math. Sciences, Tsinghua Univ., Beijing; Service de Physique de l' État Condensé, CEA-Saclay), W.X. Ma (Dept. of Math., Univ. of Hong Kong; Dept. of Math., Univ. of South Florida), Y.B. Zeng (Dept. of Math. Sciences, Tsinghua Univ., Beijing),
Higher order potential expansion for the continuous limit of the Toda hierarchy, J. Phys. A: Math. Gen. **35**, 4915-4928 (2002).
Cit. : [14] [15] [16]

(275) (276) L. Degiovanni, G. Magnano (Dip. di Matematica, Univ. di Torino),
A Tri-hamiltonian route to spectral curves, in: "Nolinear Physics: Theory and Experiment. II", Proceedings of the workshop held in Gallipoli, 27 June-6 July (edited by J.M. Ablowitz, M. Boiti, F. Pempinelli, B. Prinari), pp.167-171. World Scientific, ISBN 9812382704, 9789812382702 (2003).
Cit. : [12]

(277) (278) L. Degiovanni, G. Magnano (Dip. di Matematica, Univ. di Torino),
Tri-hamiltonian vector fields, spectral curves and separation coordinates, Rev. Math. Phys. **14**, 1115-1163 (2002).
Cit. : [12][13]

(279) (280) R. Rokhnizadeh (Dept. of Physics, Univ of Isfahan, Iran), H.D. Doebner (Dept. of Physics, Technical University of Clausthal, Germany),
Geometric formulation of Berezin quantization, Proc. Inst. Math. NAS Ukraine **43**(2), 683-687 (2002).
Cit. : [2] [3]

(281) I. Zakharevich (Dept. of Mathematics, Ohio State Univ.)
Kronecker webs, biHamiltonian structures, and the method of argument translation, Transform. Groups **6**, 267-300 (2001).
Also available as arXiv:math.SG/9908034.
Cit. : [12]

(282) **(283)** **(284)** D. C. Brody (Blackett Laboratory, Imperial College, London), L. P. Hughston (Dept. of Mathematics, King's College, London), *Geometric quantum mechanics*, J. Geom. Phys. **38**, 16-53 (2001).
Cit. : [2][3] + PhD thesis of L.P. [4]

(285) A.J. Maciejewski, M. Przybylska (Nicholas Copernicus Univ., Torun), *Studies of the Hoyer system*, Reports on Mathematical Physics **48**, 131-138 (2001).
Cit. : [12]

(286) G. Vilasi (Dipartimento di Scienze Fisiche Universita di Salerno), *Hamiltonian Dynamics*, ISBN-10: 9810233086, ISBN-13: 978-9810233082, World Scientific (2001).
Cit. : [1]

(287) G. Falqui (SISSA, Trieste), F. Magri (Dip. di Matematica, Univ. di Milano Bicocca), M. Pedroni (Dip. di Matematica, Univ. di Genova), *BiHamiltonian geometry and separation of variables for Toda lattices*, Journal of Nonlinear Mathematical Physics **8**, Supplement, 118-127 (2001) (Proceedings: NEEDS '99).
Cit. : [13]

(288) **(289)** M. Czachor, H.D. Doebner, *Schödinger picture correlation functions for nonlinear evolutions*, arXiv:quant-ph/0106051 (2001).
Cit. : [2][3]

(290) **(291)** W. Stulpe, M. Swat (Inst. Theoret. Phys., Tech. Univ., Berlin) *Quantum states as probability measures*, Foundations of Physics Letters **14**, 285-293 (2001).
Cit. : [2][3]

(292) I. Antoniou, E. Karpov (International Solvay Institute for Physics and Chemistry and Univ. Libre de Bruxelles), G. Pronko (International Solvay Institute for Physics and Chemistry and Institute for High Energy Physics, Protvino, Moscow), *Non locality in electrodynamics*, Foundations of Physics **31**, 1641-1655 (2001).
Cit. : [2]

(293) Abstracts, Edited by G. Van Brummelem, *Historia Mathematica* **28**, page 67 (2001).
Cit. : [17] (it summarizes the review of this essay written for MathSciNet by C. Bartocci, Dip. di Matematica, Univ. di Genova) .

(294) (295) Israel M. Gelfand (Dept. of Mathematics, Rutgers Univ.), I. Zakharevich, (Dept. of Mathematics, Ohio State Univ),
Webs, Lenard schemes, and the local geometry of biHamiltonian Toda and Lax structures, Selecta Math. **6**, 131-183 (2000).
Cit. : [12]

(296) T. Ernst,
The hystory of q-calculus and a new method, Licentiate Thesis, U. U. D. M. Report 2000:16, ISSN 1101-3591, Department of Mathematics, Uppsala University (2000) (available at http://www.geocities.com/solnaschack /ernst/index.html).
Cit. : [13]

(297) L. Mangiarotti (Department of Mathematics and Informatics, Univ. of Camerino), G. Sardanashvily (Department of Mathematics, Moscow University),
Connections in Classical and Quantum Field Theory, World Scientific, ISBN: 981-02-2013-8 (2000).
Cit. : [2]

(298) (299) (300) K. Kawamura (Research Inst. for Math. Sci., Kyoto Univ.),
Infinitesimal Takesaky duality of Hamiltonian vector fields on a symplectic manifold, Rev. Math. Phys. **12**, 1669-1688 (2000).
Cit. : [2][3][7]

(301) (302) (303) M. Czachor, M. Kuna, S. B. Leble, J. Naudts (Politechnika Gdańsk, Poland; Arnold Sommerfeld Institute of Mathematical Physics, Technical University of Clausthal, Germany; Universiteit Antwerpen, Belgium; Kaliningrad State University, Russia)
Nonlinear Von Neumann-type equations, Proocedings of the Symposium "Trends in Quantum Mechanics", Goslar, Germany (H. Doebner et al, Editors), World Scientific (2000).
Cit. : [2][3][5]

(304) (305) (306) (307) P. Bona (Dept. of Theor. Physics, Comenius University, Bratislava),
Extended Quantum Mechanics, Acta Physica Slovaka vol. **50** no. 1, 1-198 (2000)
Cit. : [2][3][5][7]

(308) **(309)** A. Meucci (Dip. di Matematica, Univ. di Milano), *Compatible Lie algebroids and the periodic Toda lattice*, J. Geom. Phys. **35**, 273-287 (2000).
Cit. : [12][13]

(310) **(311)** A. Ashtekar, T.A. Schilling (Center for Gravit. Phys. and Geometry, Penn State Univ.),
Geometrical formulation of Quantum Mechanics, in *On Einstein's path*, Essays in honour of Engelbert Schucking, Springer (1999).
Cit. : [2][3]

(312) Y.B. Suris (Fach. Mathematik, Technische Universität, Berlin),
Integrable discretizations for lattice system: local equations of motion and their Hamiltonian properties, Rev. Math. Phys. **11**, 727-822 (1999). Also available at arXiv:solv-int/9709005v4 (15 Oct 1997).
Cit. : [13]

(313) I. Antoniou, E. Gunzig, P. Nardone (International Solvay Institute for Physics and Chemistry and Univ. Libre de Bruxelles), G.P. Pronko (International Solvay Institute for Physics and Chemistry and Institute for High Energy Physics, Protvino, Moscow),
A Hamiltonian formalism for classical systems interacting with quantum systems, Modern Physics Letters A **14**, 2287-2303 (1999).
Cit. : [2]

(314) T. Field, L. P. Hughston (King's College, London),
The geometry of coherent states, J. Math. Phys. **40**, 2568-2583 (1999).
Cit. : [2]

(315) C. Bernardini (Dip. Fisica, Univ. di Roma "La Sapienza"),
La fisica nella cultura italiana del Novecento, Ed. Laterza (1999).
Cit. : it cites the book containing the essay [17]

(316) C. Morosi ¶(Dip. di Matematica, Politecnico di Milano), G. Tondo (Dip. di Scienze Matematiche, Univ. di Trieste),
Bi-Hamiltonian manifolds, quasi-bi- Hamiltonian systems and separation variables, Report on Mathematical Physics **44** (1-2), 255-266 (1999).
Cit. : [12]

(317) Y.B. Suris, (Fach. Mathematik, Technische Universität, Berlin), O. Ragnisco (Dip. Fisica, Univ. Roma III),
What is the relativistic Volterra lattice?, Commun. Math. Phys. **200**, 445-485 (1999).
Cit. : [13]

(318) B. Fuchssteiner (Dept. of Mathematics, Univ. of Paderborn, Germany), W. X. Ma (Dept. of Mathematics, City Univ. of Hong Kong),
Algebraic structure of discrete zero-curvature equations and master symmetries of discrete evolution equations, J. Math. Phys. **40**, 2400-2418 (1999).
Cit. : [13]

(319) K. Kawamura (Research Inst. for Math. Sci., Kyoto Univ.),
Structure of the group of automorphisms of C^*-algebras, in "Recent topics in the theory of operator algebras (related to geometry)", Kyoto, Surikaisekikenkyusho Kokyuroku **1077**, 1-12 (1999). Also available as arXiv:math.OA/9809109.
Cit. : [7]

(320) K. Kawamura (RIMS, Kyoto),
The Serre-Swan theorem for non commutative C^*-algebras, in "Hilbert C^*-modules and groupoid C^*-algebras", Kyoto, Surikaisekikenkyusho Kokyuroku **1110**, 1-8 (1999). Also available as arXiv:math.OA/0002160.
Cit. : [7]

(321) (322) M. Reginatto (Environmental Measurements Laboratory, U.S. Department of Energy, New York),
Hydrodynamical formulation of quantum mechanics, Kähler structure, and Fisher information, arXiv:quant-ph/9909065 (1999).
Cit. : [2][3]

(323) M.S. Tu (Dept. of Mathematics, Taiwan), J.C. Shaw, (Dept. of Applied Mathematics, Taiwan),
Hamiltonian strucutures of generalized Manin-Radul superKdV and constrained super KP hierarchies, J. Math. Phys. **40**, 3021-3034 (1999).
Cit. : [9]

(324)(325)(326) Y. Zeng, R. Lin, X. Cao (Dept. of Applied Math., Tsinghua Univ., Beijing),
The relation between the Toda hierarchy and the KdV hierarchy, Phys. Lett. A **251**, 177-183 (1999).
Cit. : [14][15][16]

(327) (328) R. Cirelli¶, M. Gatti, A. Manià¶(Dipartimento di Fisica, Università di Milano and INFN),
On the nonlinear extension of quantum superposition and uncertainty principles, Journal of Geometry and Physics **29**, 64-86 (1999).
Cit. : [2] [3]

(329) R. Lin, X. Cao (Dept. of Applied Math., Tsinghua Univ., Beijing),
Continuous limiit for the Toda hierarchy, Advances in Mathematics (China) **27** (4), 369-372 (1998).
Cit. : [14]

(330) (331) D.C. Brodie (Blackett Laboratory, Imperial College, London), L.P. Hughston (King's College, London),
Geometric models for quantum statistical inference, in *The Geometric Universe*, (Symposium in honour of Sir Roger Penrose, St. John's College, Oxford), Oxford Univ. Press (1998)
Cit. : [2][3]

(332) P. Casati (Dip di Mat., Univ. di Milano), G. Falqui (SISSA, Trieste), F. Magri (Dip. di Mat., Univ. di Milano), M. Pedroni (Dip. di Mat., Univ. di Genova),
BiHamiltonian reductions and W_n-algebras, J. Geom. Phys. **26**, 291-310 (1998).
Cit. : [10]

(333) F. Delduc, L. Gallot (Laboratoire de Physique, Lyon),
Supersymmetric Drinfeld-Sokolov Reduction, J. Math. Phys. **39**, 4729-4745 (1998).
Cit. : [6]

(334) M. Legaré, J. Lachapelle (Dept. of Math. Sciences, Univ. of Alberta),
Super-matrix KdV and super-generalized NS equations from self-dual Yang-Mills systems with supergauge groups, Letters in Math. Phys. **45**, 195-202 (1998).
Cit. : [11]

(335) (336) (337) N.P. Landsman (Korteweg-de Vries Institute for Mathematics, Univ. of Amsterdam),
Mathematical topics between classical and quantum mechanics, Springer Monographs in Mathematics (1998).
Cit. : [2][3][7]

(338) Blaszak, M. (Dept. of Physics, A. Mickiewicz Univ., Poznan),
MultiHamiltonian theory of dynamical systems, Texts and Monographs in Physics, Springer (1998).
Cit. : [10]

(339) (340) (341) J.C. Shaw, M.S. Tu,
A note on the gauge equivalence between the Manin-Radul and the Laberge-Mathieu super-KdV hierarchies, J. Phys. A: Mathematical and General, **31**, 4805-4810 (1998).
Cit. : [6][9][10]

(342) *Canonical gauge equivalence of the sAKNS and sTB hierarchies*, J. Phys. A: Mathematical and General, **31**, 6517-6523 (1998).
Cit. : [9]

(343) M. Legarè (Dept. of Math. Sciences, Univ. of Alberta, Edmonton),
Reduction of self-dual Yang-Mills systems and super nonlinear Schrödinger equations, Proceedings of the Workshop "Supersymmetry and Integrable Models" held at Chicago, June 1997, Lecture Notes in Physics **502**, 257-267, Springer, Berlin (1998).
Cit. : [11]

(344) Q.P. Liu, M. Manas (Univ. Complutense, Madrid),
Darboux transformations for SUSY integrable systems, Proceedings of the Workshop "Supersymmetry and Integrable Models" held at Chicago, June 1997, Lecture Notes in Physics **502**, 269-281, Springer, Berlin (1998).
Cit. : [10]

(345) C. Morosi ¶(Dip. di Matematica, Politecnico di Milano), G. Tondo (Dip. di Scienze Matematiche, Univ. di Trieste),
On a class of dynamical systems both quasi-bi-Hamiltonian and bi-Hamiltonian, Physics Letters A **247** (1-2), 59-64 (1998).
Cit. : [12]

(346) (347) N.P. Landsman (Dept. of Applied Math. and Theor. Phys, Univ. of Cambridge),
Poisson spaces with a transition probability, Rev. Math. Phys. **9**, 29–57 (1997).
Cit. : [2] [7]

(348)(349)(350) H. Aratyn, C. Rasinariu (Dept. of Phys., Univ. of Illinois, Chicago),
Manifestly supersymmetric Lax integrable hierarchies, Phys. Lett. B **391**, 99–106 (1997).
Cit. : [6][9][11]

(351) M. Legaré (Dept. of Math. Sciences, Univ. of Alberta, Edmonton),
Self-dual Yang Mills equations and integrable reductions, Int. J. Mod. Phys. A **12**, 219–224 (1997). (Special issue: Proc. of the 2nd Int. Workshop on Classical and Quantum Integrable Systems, Algebraic Methods and Lie Algebra Contractions, Dubna, Russia)
Cit. : [11]

(352) M. Legaré, *Lie Superalgebra valued self-dual Yang-Mills fields and symmetry reductions*, Journal of Nonlinear Mathematical Physics **4**, 383–391 (1997).
Cit. : [11]

(353) V.I. Manko, G. Marmo, F.Zaccaria (Dip. di Fisica, Univ. di Napoli), E.C.G. Sudarshan, (Dept. of Physics, Center for Particle Physics, Univ. of Texas),
Wigner's problem and alternative commutation relations for Quantum Mechanics, Int. J. Mod. Phys. B **11**, 1281-1296 (1997).
Cit. [1]

(354) G. Cassinelli, E. Devito, A. Levrero (Dip di Fisica, Univ. di Genova),
Integrability of the quantum adiabatic evolution and Geometric phases, J. Math. Phys. **38**, 6101-6118 (1997).
Cit. : [1]

(355)(356)(357) Z. Popowicz (Inst. of Theor. Phys, Univ. of Wroclav),
SUSY 2, Computer Phys. Communications **100**, 277–296 (1997).
Cit. : [6][9][11]

(358) N. Burić (Dept. of Physics and Mathematics, Beograd)
Reduction of an infinite dimensional Hamiltonian system in classical and quantum mechanics, University of Nis, Facta Universitatis, Series: Physics, Chemistry and Technology **1**(4), 15-20 (1997).
Cit. :. [1]

(359) (360) Q.P. Liu, (Dept. of Phys., Univ. Complutense, Madrid),
Fully supersymmetric hierarchies from an energy-dependent super-Hill operator, J. Phys. A- Mathematical and General **30**, 8661–8670 (1997).
Cit. : [6][11]

(361) (362) Q.P. Liu, (Dept. of Phys., Univ. Complutense, Madrid),
On the integrable hierarchies associated with the $N = 2$ super W_n algebra, Phys. Letters A **235**, 335–340 (1997).
Cit. : [6][8]

(363) Q.P. Liu, M. Manas, (Dept. of Phys., Univ. Complutense, Madrid),
Crum transformations and Wronskian-type solutions for supersymmetric KdV equation, Phys. Lett. B **396**, 133-140 (1997).
Cit. : [11]

(364) P. Leifer, (Faculty of Exact Sciences and Institue of Adv. Studies, Tel Aviv Univ.),
Found. Phys. **27**, 261–285 (1997) (Special issue: invited papers in honour of Lawrence Horwitz). Cit. : [5]

(365) P. Leifer, (Faculty of Exact Sciences and Institue of Adv. Studies, Tel Aviv Univ.),
Dynamical spacetime and the curvature of projective state space, arXiv:gr-qc/9711059 (20 November 1997).
Cit. : [5]

(366) (367) (368) K. Kawamura (Research Inst. for Math. Sci., Kyoto Univ.),
Quantum mechanics and operator algebras on the Hilbert ball, arXiv:funct-an/9710002 (1997).
Cit. : [2][3][7]

(369) G. Vilasi (Dip. di Fisica Teor., Univ. di Salerno, and INFN),
Liouville integrability of the Schrödinger equation (Talk given at the Prooceedings of the Caserta Conference *Mesoscopic Systems and Quantum-like Phenomena*); available as arXiv:quant-ph/9710022 (7 October 1997)).
Cit. : [1]

(370) G. Marmo (Dip. di Sc. Fis., Univ. di Napoli), G. Vilasi (Dip. di Fisica Teor., Univ. di Salerno),
Symplectic structures and Quantum Mechanics, Mod. Phys. Letters B **10**, 545–553 (1996).
Cit. : [1]

(371) (372) Y. Kosmann-Schwarzbach (Centre Math. CNRS, Ecole Polytechnique, Palaiseau), F. Magri (Dip. di Mat., Univ. di Milano),
Lax-Nijenhuis operators for integrable systems, J. Math. Phys. **37**, 6173–6197 (1996).
Cit. : [10][12]

(373)(374) L. P. Hughston (Dept. of Mathematics, King's College, London),
Geometry of stochastic state vector reduction, Proc. Royal Soc. Lond. A **452**, 953–979 (1996).
Cit. : [2][3]

(375) (376) (377) Z. Popowicz (Inst. of Theor. Phys, Univ. of Wroclav),
The extended supersymmetrization of the multicomponent Kadomtseev- Petviashvilli hierarchy, J. Phys. A: Math. Gen. **29**, 1281–1291 (1996).
Cit. : [6][9][11]

(378) Q.P. Liu (Institute of Theor. Phys, Acad. Sinica, Beijing),
A note on supersymmetric 2-boson equations, Commun. in Theor. Phys. **25**, 505–508 (1996).
Cit. : [9]

(379) N.P. Landsmann (Dept. of Applied Mathematics and Theoretical Physics, University of Cambridge),
The infinite unitary group, Howe dual pairs, and the quantization of constrained systems, arXiv:hep-th/9411171 (23 November 1994).
Cit. [2]

(380) N.P. Landsmann (Dept. of Applied Mathematics and Theoretical Physics, University of Cambridge)
Classical and quantum representation theory, Proc. Seminar 1989-1990 on Mathematical Structures in Field Theory (Amsterdam), 135-163, CWI Syllabi, 39, Math. Centrum, Centrum Wisk. Inform., Amsterdsam (1996).
Also available as arXiv:quant-ph/9411172 (23 November 1994).
Cit. : [2]

(381) R. J. Adler, O. C. Jacob (Dept. of Phys. and Astronomy, San Francisco State Univ., and Stanford Linear Accelerator Center, California),
Null surfaces, initial values, and evolution operators for spinor fields, J. Math. Phys. **37**, 1091-1099 (1996).
Cit. : [9]

(382) R. J. Adler, O. C. Jacob (Dept. of Phys. and Astronomy, San Francisco State Univ., and Stanford Linear Accelerator Center, California),
Null surfaces, initial values, and evolution operators for scalar fields, arXiv:hep-th/9510049 (1995).
Cit. : [9]

(383) (384) (385) L. P. Hughston,
Geometric aspects of Quantum Mechanics, in "Twistor Theory" (S. Huggett, Ed.), Lect. Notes in Pure and Applied Math., M. Dekker, 59–79 (1995).
Cit. : [2][3] + my PhD thesis [4]

(386) Q.P. Liu,
Darboux transformations for supersymmetric Korteweg-de Vries Equations Lett. Math. Phys. **35**, 115-122 (1995).
Cit. : [6]

(387) (388) (389) M. Czachor (Politechnika Gdańsk, Poland)
Elements of nonlinear quantum mechanics (I): nonlinear Schrödinger equation and two-level atoms, arXiv:quant-ph/9501007 (9 January 1995).
Cit. : [1] [2] [3]

(390) K.R.W. Jones (Phys. Dept., Univ. of Queensland, Brisbane),
Linear quantum theory and its possible nonlinear generalizations, Annals of Physics **233**, 295–316 (1994).
Cit. : [5]

(391) (392) S. Bugajski (Inst. of Phys., Univ. of Silesia, Katovice),
Topologies on pure quantum states, Phys. Lett. A **190**, 5–8 (1994).
Cit. : [2][3]

(393) K.R.W. Jones,
Exclusion of intrinsically classical domains and the problem of quasi-classical emergence, Phys. Rev. A **50**, 1062–1070 (1994).
Cit. : [5]

(394) (395) (396) M. Czachor,
Apects of nonlinear quantum mechanics, PhD Thesis, Center for Theoretical Physics, Polish Academy of Sciences, Warszawa (1994).
Cit. : [1] [2] [3]

(397) Z. Popowicz (Inst. of Theor. Phys., Univ. of Wroclav),
The extended supersymmetrization of the nonlinear Schrödinger equation, Phys. Lett. A **194**, 375–379 (1994).
Cit. : [8]

(398) Z. Popowicz,
The Lax formulation of the $N = 2$ susy Boussinesq equation, Phys. Lett. B **319**, 478–484 (1993).
Cit. : [6]

(399) P. Bona (Dept. of Theor. Physics, Comenius University, Bratislava),
Generalized quantum mechanics and classical observables, Proceedings of the II International Wigner Symposium (Goslar, Germany, July 16-20, 1991; Edited by H. D. Doebner, W. Scherer, F. Schroeck, E. P. Wigner), World Scientific, Singapore, 1993.
Available at http://sophia.dtp.fmph.uniba.sk/ bona/reports.html
Cit. : [2] .

(400) P. Bona (Dept. of Theor. Physics, Comenius University, Bratislava),
On Nonlinear Quantum Mechanics, Differential Geometry and Its Applications, Proc. Conf. Opava (Czechoslovakia), August 1992, pages 185-192 (1993).
Cit. : [2]

(401) K.R.W. Jones (Univ. of Melbourne),
Classical mechanics as an example of generalized quantum mechanics, Phys. Rev. D **45**, R2590–R2594 (1992).
Cit. : [5]

(402) P.B. Slater (Univ. of California, Santa Barbara),
The moment map of the barycentric/canonical entropy of a density operator, Phys. Lett. A **163**, 163–166 (1992).
Cit. : [5]