

Publications de l'IMB : 2015

1. B. Agrebaoui, D. Arnal, and A. Ben Hassine. Jeu de taquin and diamond cone for Lie (super)algebras. *Bull. Sci. Math.*, 139(1):75–113, 2015.
2. L. Ambrosio, R. Ghezzi, and V. Magnani. BV functions and sets of finite perimeter in sub-Riemannian manifolds. *Annales de l'Institut Henri Poincaré (C) Non Linear Analysis*, 32(3):489–517, may 2015.
3. A. Barbara. Strict quasi-concavity and the differential barrier property of gauges in linear programming. *Optimization*, 64(12):2649–2677, dec 2015.
4. M. A. Benadjaoud, F. de Vathaire, P. Blanchard, and H. Cardot. In Reply to Alber and Shn. *International Journal of Radiation Oncology*Biology*Physics*, 91(3):679, mar 2015.
5. M. Birem and C. Klein. Multidomain spectral method for schrdinger equations. *Advances in Computational Mathematics*, oct 2015.
6. J. Blanc and A. Dubouloz. Affine surfaces with a huge group of automorphisms. *International Mathematics Research Notices*, 2015(2):422–459, 2015.
7. C. Bonatti and E. Farinelli. Centralizers of C-1-contractions of the half line. *Groups Geometry and Dynamics*, 9(3):831–889, 2015.
8. C. Bonatti, S. Gan, and D. Yang. Dominated chain recurrent class with singularities. *Ann. Sc. Norm. Super. Pisa Cl. Sci. (5)*, 14(1):83–99, 2015.
9. C. Bonatti and K. Shinohara. Flexible periodic points. *Ergodic Theory Dynam. Systems*, 35(5):1394–1422, 2015.
10. B. Bonnard and M. Chyba. Preface: control and observation of nonlinear control systems with applications to medicine and space mechanics. *Acta Appl. Math.*, 135:1–3, 2015.
11. B. Bonnard, M. Claeys, O. Cots, and P. Martinon. Geometric and numerical methods in the contrast imaging problem in nuclear magnetic resonance. *Acta Appl. Math.*, 135:5–45, 2015.
12. B. Bonnard, T. Combot, and L. Jassionnesse. Integrability methods in the time minimal cohererce transfor for Ising chains of three spins. *Discrete and Continuoous Dynamical Systems*, 35(9):4095–4114, 2015.
13. B. Bonnard, H. Henninger, and J. Rouot. *Lunar Perturbation of the Metric Associated to the Averaged Orbital Transfer*, pages 65–84. Springer International Publishing, Cham, 2015.
14. B. Bonnard, H. C. Henninger, J. Némcová, and J.-B. Pomet. Time versus energy in the averaged optimal coplanar Kepler transfer towards circular orbits. *Acta Appl. Math.*, 135:47–80, 2015.
15. G. Borot, A. Guionnet, and K. K. Kozlowski. Large-N Asymptotic Expansion for Mean Field Models with Coulomb Gas Interaction. *International Mathematics Research Notices*, 2015(20):10451–10524, 2015.
16. M. Brunella. *Birational geometry of foliations*, volume 1 of *IMPA Monographs*. Springer, Cham, 2015.
17. J.-B. Caillau, M. d. R. de Pinho, L. Grüne, E. Trélat, and H. Zidani. Preface [Special issue on optimal control and related fields]. *Discrete Contin. Dyn. Syst.*, 35(9):i–3, 2015.
18. H. Cardot, A. De Moliner, and C. Goga. Estimating with kernel smoothers the mean of functional data in a finite population setting. A note on variance estimation in presence of partially observed trajectories. *Statist. Probab. Lett.*, 99:156–166, 2015.
19. G. Casnati, D. Faenzi, and F. Malaspina. Rank two ACM bundles on the del Pezzo threefold with Picard number 3. *J. Algebra*, 429:413–446, 2015.
20. P. Cénac, B. Chauvin, F. Paccaut, and N. Pouyanne. Uncommon suffix tries. *Random Structures Algorithms*, 46(1):117–141, 2015.
21. M. Chyba, J.-M. Coron, P. Gabriel, A. Jacquemard, G. Patterson, G. Picot, and P. Shang. Optimal geometric control applied to the protein misfolding cyclic amplification process. *Acta Appl. Math.*, 135:145–173, 2015.

22. B. A. Cisneros de la Cruz. Virtual braids from a topological viewpoint. *J. Knot Theory Ramifications*, 24(6):1550033, 2015.
23. T. Combot and T. Waters. Integrability conditions of geodesic flow on homogeneous Monge manifolds. *Ergodic Theory Dynam. Systems*, 35(1):111–127, 2015.
24. I. Cordero-Carrin, N. Vasset, J. Novak, and J. L. Jaramillo. Excision technique in constrained formulations of Einstein equations: collapse scenario. *J. Phys. Conf. Ser.*, 600(1):012059, 2015.
25. P. Cnac and K. Es-Sebaiy. Almost sure central limit theorems for random rations and applications to LSE for fractional Ornstein-Uhlenbeck processes. *Probability and Mathematical Statistics*, 35(2):285–300, 2015.
26. S. De Bivre, F. Genoud, and S. Rota Nodari. Orbital stability: Analysis meets geometry. In C. Besse and J.-C. Garreau, editors, *Nonlinear Optical and Atomic Systems*, volume 2146 of *Lecture Notes in Mathematics*, pages 147–273. Springer International Publishing, 2015.
27. G. Dito. The necessity of wheels in universal quantization formulas. *Comm. Math. Phys.*, 338(2):523–532, 2015.
28. A. Dubouloz. Complements of hyperplane sub-bundles in projective spaces bundles over \mathbb{P}^1 . *Math. Ann.*, 361(1-2):259–273, 2015.
29. A. Dubouloz. Flexible bundles over rigid affine surfaces. *Comment. Math. Helv.*, 90(1):121–137, 2015.
30. A. Dubouloz and T. Kishimoto. Log-uniruled affine varieties without cylinder-like open subsets. *Bull. Soc. Math. France*, 143(2):383–401, 2015.
31. A. Dubouloz and S. Lamy. Automorphisms of open surfaces with irreducible boundary. *Osaka J. Math.*, 52(3):747–791, 2015.
32. B. Dubrovin, T. Grava, C. Klein, and A. Moro. On critical behaviour in systems of Hamiltonian partial differential equations. *J. Nonlinear Sci.*, 25(3):631–707, 2015.
33. M. Dugave, F. Göhmann, K. K. Kozlowski, and J. Suzuki. Low-temperature spectrum of correlation lengths of the XXZ chain in the antiferromagnetic massive regime. *J. Phys. A*, 48(33):334001, 2015.
34. M. Dugave, F. Göhmann, K. K. Kozlowski, and J. Suzuki. On form-factor expansions for the XXZ chain in the massive regime. *J. Stat. Mech. Theory Exp.*, (5):P05037, 2015.
35. D. Faenzi. Yet again on two examples by Iyama and Yoshino. *Bull. Lond. Math. Soc.*, 47(5):809–817, 2015.
36. D. Faenzi and L. Manivel. On the derived category of the Cayley plane II. *Proceedings of the AMS*, 143(3):1057–1074, 2015.
37. S. Fang and V. Nolot. Optimal transport maps on infinite dimensional spaces. *Front. Math. China*, 10(4):715–732, 2015.
38. S. Fang and A. Pilipenko. Additive functionals and push forward measures under Veretennikov's flow. In *Festschrift Masatoshi Fukushima*, volume 17 of *Interdiscip. Math. Sci.*, pages 163–178. World Sci. Publ., Hackensack, NJ, 2015.
39. P. Fima, S. Moon, and Y. Stalder. Highly transitive actions of groups acting on trees. *Proceedings of the AMS*, 143(12):5083–5095, 2015.
40. J. Frauendiener and C. Klein. Computational approach to hyperelliptic Riemann surfaces. *Lett. Math. Phys.*, 105(3):379–400, 2015.
41. P. Gaillard. Hierarchy of solutions to the nls equation and multi-rogue waves. *Journal of Physics: Conference Series*, 574(1):012031, 2015.
42. P. Gaillard. Higher order peregrine breathers solutions to the nls equation. *Journal of Physics: Conference Series*, 633(1):012106, 2015.
43. P. Gaillard. Multi-parametric deformations of peregrine breathers solutions to the nls equation. *Advances in Research*, 4(5):346–364, 2015.

44. P. Gaillard. Other $2N - 2$ parameters solutions of the NLS equation and $2N + 1$ highest amplitude of the modulus of the N th order AP breather. *J. Phys. A*, 48(14):145203, 23, 2015.
45. P. Gaillard. Tenth Peregrine breather solution to the NLS equation. *Ann. Physics*, 355:293–298, 2015.
46. P. Gaillard and M. Gastineau. The Peregrine breather of order nine and its deformations with sixteen parameters solutions to the NLS equation. *Phys. Lett. A*, 379(20-21):1309–1313, 2015.
47. R. Garcia, R. Langevin, and P. Walczak. Foliations making a constant angle with principal directions on ellipsoids. *Ann. Polon. Math.*, 113(2):165–173, 2015.
48. R. Ghezzi and F. Jean. Hausdorff volume in non equiregular sub-Riemannian manifolds. *Nonlinear Anal.*, 126:345–377, 2015.
49. T. Grava, A. Kapaev, and C. Klein. On the tritronquée solutions of P_I^2 . *Constr. Approx.*, 41(3):425–466, 2015.
50. N. Gromov, V. Kazakov, S. Leurent, and D. Volin. Quantum spectral curve for arbitrary state/operator in AdS5/CFT4. *Journal of High Energy Physics*, 2015(9), sep 2015.
51. S. Herrmann and D. Landon. Statistics of transitions for Markov chains with periodic forcing. *Stochastics and Dynamics*, 15(4), 2015.
52. J. L. Jaramillo. A perspective on Black Hole Horizons from the Quantum Charged Particle. *J. Phys. Conf. Ser.*, 600(1):012037, 2015.
53. J. L. Jaramillo. Black hole horizons and quantum charged particles. *Classical Quantum Gravity*, 32(13):132001, 2015.
54. A. Jofré and A. Jourani. Characterizations of the free disposal condition for nonconvex economies on infinite dimensional commodity spaces. *SIAM J. Optim.*, 25(1):699–712, 2015.
55. M. Keilberg. Automorphisms of the doubles of purely non-abelian finite groups. *Algebras and Representation Theory*, 18(5):1267–1297, 2015.
56. C. Klein and R. Peter. Numerical study of blow-up and dispersive shocks in solutions to generalized Korteweg-de Vries equations. *Phys. D*, 304/305:52–78, 2015.
57. C. Klein and K. Roidot. Numerical study of the long wavelength limit of the Toda lattice. *Nonlinearity*, 28(8):2993–3025, 2015.
58. C. Klein and J.-C. Saut. A numerical approach to blow-up issues for Davey-Stewartson II systems. *Commun. Pure Appl. Anal.*, 14(4):1443–1467, 2015.
59. C. Klein and J.-C. Saut. A numerical approach to blow-up issues for dispersive perturbations of Burgers' equation. *Phys. D*, 295/296:46–65, 2015.
60. K. K. Kozlowski. Large-distance and long-time asymptotic behavior of the reduced density matrix in the non-linear Schrödinger model. *Ann. Henri Poincaré*, 16(2):437–534, 2015.
61. K. K. Kozlowski. Unitarity of the SoV transform for the Toda chain. *Comm. Math. Phys.*, 334(1):223–273, 2015.
62. K. K. Kozlowski and J. M. Maillet. Microscopic approach to a class of 1D quantum critical models. *Journal of Physics A: Mathematical and Theoretical*, 48(48):484004, 2015.
63. R. Langevin, J.-C. Sifre, L. Druoton, L. Garnier, and M. Paluszny. Finding a cyclide given three contact conditions. *Comput. Appl. Math.*, 34(1):275–292, 2015.
64. M. Lewin and S. Rota Nodari. Uniqueness and non-degeneracy for a nuclear nonlinear Schrödinger equation. *NoDEA Nonlinear Differential Equations Appl.*, 22(4):673–698, 2015.
65. M. Mackaay and A.-L. Thiel. A diagrammatic categorification of the affine q -Schur algebra $\widehat{S}(n, n)$ for $n \geq 3$. *Pacific J. Math.*, 278(1):201–233, 2015.
66. V. B. Matveev, P. Dubard, and A. Smirnov. Quasi-rational solutions of the nonlinear Schrödinger equation. *Nelin. Dynam.*, 11(2):219–240, 2015.

67. L. Paris and B. Szepietowski. A Presentation for the mapping class group of a nonorientable surface. *Bulletin de la SMF*, 143(3):503–566, 2015.
 68. C. Petitjean. Cyclic covers of affine \mathbb{T} -varieties. *J. Pure Appl. Algebra*, 219(9):4265–4277, 2015.
 69. J.-P. Rolin and T. Servi. Quantifier elimination and rectilinearization theorem for generalized quasianalytic algebras. *Proc. Lond. Math. Soc. (3)*, 110(5):1207–1247, 2015.
 70. P. Rossi. Nijenhuis operator in contact homology and descendant recursion in symplectic field theory. In *Proceedings of the Gökova Geometry-Topology Conference 2014*, pages 156–191. Gökova Geometry/Topology Conference (GGT), Gökova, 2015.
 71. S. Rota Nodari, M. Conforti, G. Dujardin, A. Kudlinski, A. Mussot, S. Trillo, and S. De Bièvre. Modulational instability in dispersion-kicked optical fibers. *Phys. Rev. A*, 92:013810, Jul 2015.
 72. S. Rota Nodari and S. Serfaty. Renormalized energy equidistribution and local charge balance in 2D Coulomb systems. *Int. Math. Res. Not. IMRN*, (11):3035–3093, 2015.
 73. A. Rousselle. Quenched invariance principle for random walks on Delaunay triangulations. *Electron. J. Probab.*, 20(33), 2015.
 74. A. Rousselle. Recurrence or transience of random walks on random graphs generated by point processes in \mathbb{R}^d . *Stochastic Process. Appl.*, 125(12):4351–4374, 2015.
 75. T. Saucedo, R. Laffont, C. Labruere, A. Jebrane, E. Francois, and B. Eble, Gunther J. David. Empirical and theoretical study of atelostomate (Echinoidea, Echinodermata) plate architecture: using graph analysis to reveal structural constraints. *Paleobiology*, 41(3):436–459, 2015.
 76. P. Schauenburg. A higher Frobenius-Schur indicator formula for group-theoretical fusion categories. *Comm. Math. Phys.*, 340(2):833–849, 2015.
 77. P. Schauenburg. Computing higher frobenius-schur indicators in fusion categories constructed from inclusions of finite groups. *Pacific Journal of Mathematics*, 280(1):177–201, jan 2016.
 78. S. Vaïter, M. Golbabaei, J. Fadili, and G. Peyré. Model selection with low complexity priors. *Inf. Inference*, 4(3):230–287, 2015.
 79. S. Vaïter, G. Peyré, and J. Fadili. *Sampling Theory, a Renaissance*, chapter Low Complexity Regularization of Linear Inverse Problems. Springer-Birkhäuser, 2015.
 80. E. Vieillard-Baron. Simple and contracting arborification. In *Faà di Bruno Hopf algebras, Dyson-Schwinger equations, and Lie-Butcher series*, volume 21 of *IRMA Lect. Math. Theor. Phys.*, pages 265–353. Eur. Math. Soc., Zürich, 2015.
-

Publications Accès Online : 2015

- F. Beguin, C. Bonatti, and B. Yu. A spectral-like decomposition for transitive anosov flows in dimension three. *Mathematische Zeitschrift*, pages 1–24, 2015.
- M. A. Bertolim, A. Jacquemard, and G. Vago. Integration of a dirac comb and the bernoulli polynomials. *Bulletin des Sciences Mathmatiques*, 2015.
- D. Bohnet and C. Bonatti. Partially hyperbolic diffeomorphisms with a uniformly compact center foliation: the quotient dynamics. *Ergodic Theory and Dynamical Systems*, FirstView:1–39, dec 2015.
- C. Bonatti and H. Eynard-Bontemps. Connectedness of the space of smooth actions of \mathbb{Z}^n on the interval. *Ergodic Theory and Dynamical Systems*, FirstView:1–31, 12 2015.

- R. Correa, A. Hantoute, and [A. Jourani](#). Characterizations of convex approximate subdifferential calculus in banach spaces. *Trans. Amer. Math. Soc.*, page 1, 2015.
 - M. Deaconu, [S. Herrmann](#), and S. Maire. The walk on moving spheres: A new tool for simulating brownian motion's exit time from a domain. *Mathematics and Computers in Simulation*, 2015.
 - [A. Jourani](#), L. Thibault, and D. Zagrodny. The NSLUC property and klee envelope. *Mathematische Annalen*, aug 2015.
 - [P. Schauenburg](#). Module categories of finite hopf algebroids, and self-duality. *Transactions of the AMS*, 2015.
-