

Publications

Valentin Ovsienko

Livre

1. V. Ovsienko, S. Tabachnikov, Projective differential geometry old and new, from Schwarzian derivative to the cohomology of diffeomorphism groups, *Cambridge Tracts in Mathematics*, **165**, Cambridge University Press, 2005, 249 pp.

Articles soumis

2. V. Ovsienko, R. Schwartz, S. Tabachnikov, *The Pentagram map: a discrete integrable system*, soumis.
3. V. Ovsienko, *Lie antialgebras: prémices*, soumis.

Articles de recherche

4. S. Morier-Genoud, V. Ovsienko, *Simple graded commutative algebras*, à paraître dans J. of Algebra.
5. S. Morier-Genoud, V. Ovsienko, *Well, Papa, can you multiply triplets?*, Math. Intelligencer, **31**:4 (2009), 1–2.
6. V. Ovsienko, *Bi-Hamiltonian nature of the equation $u_{tx} = u_{xy}u_y - u_{yy}u_x$* , Adv. in Pure and Appl. Math., **1**:1 (2009).
7. V. Ovsienko, R. Schwartz, S. Tabachnikov, *Quasiperiodic Motion for the Pentagram Map*, Electron. Res. Announc. Math. Sci., **16** (2009), 1–8.
8. H. Gargoubi, V. Ovsienko, *Supertransvectents and symplectic geometry*, Internat. Math. Res. Notices., 2008, N.9.
9. V. Ovsienko, S. Tabachnikov, *Hyperbolic Carathéodory conjecture*, Proc. Steklov Inst. 258 (2007) 178–193.
10. V. Ovsienko, C. Roger, *Looped cotangent Virasoro algebra and non-linear integrable systems in dimension $2+1$* , Comm. Math. Phys. 273 (2007), no. 2, 357–378.

11. H. Gargoubi, N. Mellouli, V. Ovsienko, *Differential operators on supercircle: conformally equivariant quantization and symbol calculus*, Lett. Math. Phys. **79** (2007), no. 1, 51–65.
12. V. Ovsienko, *Vector fields in the presence of a contact structure*, Enseign. Math. (2) **52** (2006), no. 3-4, 215–229.
13. H. Gargoubi, P. Mathonet, V. Ovsienko, *Symmetries of modules of differential operators*, J. of Nonlinear Mathematical Physics, **12** (2005) 148–156.
14. C. Duval, A. El Gradechi, V. Ovsienko, *Projectively and conformally invariant star-products*, Comm. Math. Phys., **244** (2004), no. 1, 3–27.
15. V. Ovsienko, P. Redou, *Generalized Transvectants-Rankin-Cohen Brackets*, Lett. Math. Phys., **63** (2003) 19–28.
16. B. Agrebaoui, M. Ben Ammar, N. Ben Fraj, V. Ovsienko, *Deformations of modules of differential forms* J. of Nonlinear Mathematical Physics, **10** (2003) 148–156.
17. F. Ammar, B. Agrebaoui, V. Ovsienko, *Multi-parameter deformations of the module of symbols of differential operators*, Internat. Math. Res. Notices., (2002) N.16, 847–869.
18. C. Duval, V. Ovsienko, *Conformally equivariant quantum Hamiltonians*, Selecta Mathematica, NS., **7** (2001) 291–320.
19. C. Duval, V. Ovsienko, *Projectively equivariant quantization and symbol calculus: noncommutative hypergeometric function*, Lett. Math. Phys., **57** (2001) 61–67.
20. V. Ovsienko, S. Tabachnikov, *Projective geometry of polygons and discrete 4-vertex and 6-vertex theorems*, Enseign. Math., **47** (2001) 3–19.
21. H. Gargoubi, V. Ovsienko, *Modules of differential operators on the real line*, Funct. Analysis Appl., **35:1** (2001) 16–22.
22. P. Lecomte, V. Ovsienko, *Cohomology of the vector fields Lie algebra and modules of differential operators on a smooth manifold*, Compositio Math., **124:1** (2000) 95–110.
23. C. Duval, V. Ovsienko, *Schwarzian derivative and Lorentzian word-lines*, Funct. Anal. Appl., **34:2** (2000) 135–137.

24. S. Bouarroudj, V. Ovsienko, *Schwarzian derivative related to the modules of differential operators on a locally projective manifold*, Banach Center Publications, **51** (2000) 15–23.
25. C. Duval, P. Lecomte, V. Ovsienko, *Conformally equivariant quantization: existence and uniqueness*, Ann. Inst. Fourier. **49:6** (1999) 1999–2029.
26. P. Lecomte, V. Ovsienko, *Projectively equivariant symbol calculus*, Lett. Math. Phys., **49:3** (1999) 173–196.
27. V. Ovsienko, C. Roger, *Deforming the Lie algebra of vector fields on S^1 inside the Lie algebra of pseudodifferential operators on S^1* , AMS Transl. Ser. 2, (Adv. Math. Sci.) vol. 194 (1999) 211–227.
28. V. Ovsienko, C. Roger, *Deforming the Lie algebra of vector fields on S^1 inside the Poisson algebra on T^*S^1* , Comm. Math. Phys., **198** (1998) 97–110.
29. V. Ovsienko, C. Roger, *Generalization of Virasoro group and Virasoro algebra through extensions by the modules of tensor densities on S^1* , Indag. Math., N.S, **9:2** 277–288 (1998).
30. S. Bouarroudj, V. Ovsienko, *Three cocycles on $\text{Diff}(S^1)$ generalizing the Schwarzian derivative*, Internat. Math. Res. Notices (1998), N.1, 25–39.
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32. P. Marcel, V. Ovsienko, C. Roger, *Extension of the Virasoro and Neveu-Schwarz algebras and generalized Sturm–Liouville operators*, Lett. Math. Phys., **40:1** (1997), 31–39.
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34. L. Guieu, E. Mourre, V. Ovsienko, *Theorem on Six vertices of a plane curve via the Sturm theory*, Arnold-Gelfand Mathematical Seminars, Birkhäuser, 1997, 257–266.
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36. V. Ovsienko, S. Tabachnikov, *Sturm theory, Ghys theorem on zeroes of the Schwarzian derivative and flattening of Legendrian curves*, *Selecta Mathematica (N. S.)*, **2:2** (1996) 297–307.
37. V. Ovsienko, C. Roger, *Extension of the Virasoro group and the Virasoro algebra by the modules of tensor-densities on S^1* , *Funct. Anal. Appl.*, **30:4** (1996), 86–88.
38. L. Guieu, V. Ovsienko, *Structure symplectique sur les espaces des courbes projectives et affines*, *J. Geom. and Phys.*, **16** (1995) 120–148.
39. V. Ovsienko, *Projective structures and contact forms*, *Funct. Anal. Appl.*, **28:3** (1994) 187–197.
40. V. Ovsienko, *Lagrange Schwarzian derivative and symplectic Sturm theory*, *Ann. Fac. de Sci. de Toulouse*, **2:1** (1993) 73–96.
41. V. Ovsienko, O. Ovsienko, *Projective structures and infinite-dimensional Lie algebras associated with a Contact Manifold*, *Adv. Soviet Math.*, **17** (1993) 115–138.
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44. V. Ovsienko, O. Ovsienko, *Lie derivative of order n on the line. Tensor meaning of the Gelfand-Dikii bracket*, *Adv. Soviet Math.*, **2** (1991) 221–231.
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46. V. Ovsienko, B. Khesin, *Symplectic leaves of the Gelfand-Dikii bracket and homotopy classes of nondegenerate curves*, *Funct. Anal. Appl.*, **24:1** (1990) 38–47.
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49. V. Ovsienko, *Lagrange Schwarzian derivative*, Trans. Moscow University (transl. from *Vestnik MGU*) (1989) No.6, 42–45.
50. V. Ovsienko, B. Khesin, Yu. Chekanov, *Integrals of Motion of the Euler Equations of multi-dimensional hydrodynamics and superconductivity*, in: Diff. Geom., Lie Groups and Mechanics **10** (in Russian) (1989) 105–114. *English Translation:* J. of Soviet Mathem. **59:5** (1992), 1096–1101.
51. V. Ovsienko, O. Ovsienko, Yu. Chekanov, *Classification of contact-projective structures on supercircle*, Russian Math. Surveys, **44:3** (1989) 212–213.
52. V. Ovsienko, O. Udalova, *Geometry of orbits of the coadjoint representation of the Virasoro, Neveu-Schwarz and Ramond superalgebras and (super) KdV-equation*, in: Seminar on Supermanifolds **5** (D. Leites ed.), Sweden 1988, 23–59.
53. V. Ovsienko, O. Ovsienko, *Invariant complex foliations on orbits of the coadjoint representation of the Virasoro algebra*, in: Selected Topics of Algebra, Geometry and Discrete Mathematics (in Russian), Moscow University, 1988, 99–102.
54. V. Ovsienko, B. Khesin, *Korteweg-de Vries (super)-equation as an Euler equation*, Funct. Anal. Appl., **21:4** (1987) 329–331.
55. V. Ovsienko, *Aggregation of two-factor linearly homogeneous production functions*, Ekonomika i Matem. Metody (in Russian), **22:3** (1986) 555–558.
56. A. Kirillov, V. Ovsienko, O. Udalova, *Identities in the Lie algebra of vector fields on the real line*, (Russian) Akad. Nauk SSSR Inst. Prikl. Mat. Preprint 1984, N135. Selected translations (English): Selecta Mathematica Sovietica, **10:1** (1991) 7–17.

Articles Survols

57. S. Morier-Genoud, V. Ovsienko, *Graded commutative algebras: examples, classification, open problems*, à paraître dans: Proc. of XXVIII Workshop Geometrical Methods in Math. Phys.
58. V. Ovsienko, S. Tabachnikov, *What is... the Schwarzian derivative*, Notices AMS, **56**:1 (2009), 34–36.
59. V. Ovsienko, *Lie antialgebras: cohomology and representations*, in *Geometric Methods in Physics*, AIP Conf. Proc., **1079**, Amer. Inst of Phys., 2009.
60. V. Ovsienko, *Differential equations resulting from representations of Lie algebras*, to appear in: Surveys in modern mathematics, Cambridge Univ. Press.
61. V. Ovsienko, *Projective differential geometry: old and new*, Surveys in modern mathematics, 328–337, London Math. Soc. Lecture Note Ser., 321, Cambridge Univ. Press, Cambridge, 2005.
62. V. Ovsienko, *Coadjoint representation of Virasoro-type Lie algebras and differential operators on tensor-densities*, DMV-Seminar Band **31**, Birkhäuser, 2001, 231–255.
63. C. Duval, P. Lecomte, V. Ovsienko, *Methods of equivariant quantization*, Proc. of the workshop “Noncommutative Differential Geometry and its Applications to Physics”, Shonan-Kokusaimura, Japan, Mai 31-Juin 4, Kluwer 1999.

Articles de “vulgarisation”

64. V. Ovsienko, *Analysis and inequalities*, Kvant (in Russian) (1991) No.3, 15–18.
65. V. Ovsienko, *How many curves are there on the sphere?* Kvant (in Russian) (1991) No.1, 10–17.
66. V. Ovsienko, *On the Denogardius great number and Hooke’s law*, Kvant (in Russian) (1989) No.8, 8–16. Engl. transl. in: “Kvant Selecta: Algebra and Analysis–II”, AMS, 1999, S. Tabachnikov Ed., 153–159.

Articles les plus significatifs

La plupart des contenus des articles ci-dessus sont présentés dans un Rapport détaillé joint au dossier. J'extrais ci-dessous une liste plus courte d'articles jugés plus significatifs. Ces articles sont accessibles facilement sur internet. Ils peuvent également être envoyés sur demande.

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