

## LIST OF PUBLICATIONS

Ph.D. Thesis: *Local classification of differential 1-forms and vector fields.*

Thesis advisor: G. Belitskii

### Refereed Papers in Professional Journals

1. M. Zhitomirskii, On the equivalence of differential forms, *Teor. Funktsii, Funktsional. Anal. i Prilozhen.* **35** (1981), 35–41 (in Russian).
2. M. Zhitomirskii, Finite determinacy of formal series, *Teor. Funktsii, Funktsional. Anal. i Prilozhen.* **38** (1982), 57–66 (in Russian).
3. M. Zhitomirskii, Finite determinacy of differential forms, *Ukrainian Math. J.* **34** (1982), No.4 (1983) 406–409.
4. M. Zhitomirskii, A criterion for linearization of differential forms, *Soviet Math. (Iz. VUZ)* **27** No. 3 (1983), 48–56.
5. M. Zhitomirskii, Invariant normal form of series linear-equivalent to real ones, *Teor. Funktsii, Funktsional. Anal. i Prilozhen.* **40** (1983), 64–67 (in Russian).
6. M. Zhitomirskii, Systems of differential equations linearly equivalent to real ones, *Math. Notes* **34** No. 1-2 (1983), 614–617 (in Russian).
7. M. Zhitomirskii, Orbital equivalence of systems of differential equations, *Vestnik Kharkov. Gos. Univ. Mekh. Upravl. Dinam. Sistem* **241** (1983), 74–75 (in Russian).
8. M. Zhitomirskii, Finitely determined 1-forms  $\omega, \omega|_0 \neq 0$  are exhausted by the Darboux and Martinet models, *Functional. Anal. Appl.* **19** No. 1 (1985), 59–61.
9. M. Zhitomirskii, Smooth and holomorphic linearization of exterior differential 1-forms, *Functional. Anal. Appl.* **20** No. 2 (1986), 139–141.
10. M. Zhitomirskii, Finite determinacy of vector fields, diffeomorphisms and exterior differential 1-forms, *Docl. Acad. Nauk Ukr. SSR, Ser. A* **1** (1987), 6–9 (in Russian).
11. M. Zhitomirskii, Singularities and normal forms of even-dimensional Pfaff equations, *Russian Math. Surveys* **43** No. 5 (1988), 266–267.
12. M. Zhitomirskii, Singularities and normal forms of odd-dimensional Pfaff equations, *Functional. Anal. Appl.* **23** No. 1 (1989), 59–61.
13. M. Zhitomirskii, Normal forms of germs of distributions with a fixed growth vector, *Algebra and Analysis* **2** No. 5 (1990), 125–149 (in Russian); translation into English in: *Leningrad Mathematical Journal* **2** No. 5 (1990).
14. M. Zhitomirskii, Normal forms of germs of 2-dimensional distributions on  $R^4$ , *Functional. Anal. Appl.* **24** No. 2 (1990), 150–152.
15. M. Zhitomirskii, Classification of germs of regular distributions with minimal growth vector, *Funct. Anal. Appl.* **25** No. 1 (1991), 61–62.
16. M. Zhitomirskii, Normal forms of germs of smooth distributions, *Math. Notes* **49** No. 2 (1991), 139–144.

17. M. Zhitomirskii, Degenerations of differential forms and Pfaffian structures, *Russian Math. Surveys* **46:5**, 53–90.
18. M. Zhitomirskii, Local normal forms for constrained equations on 2-manifolds, *Boletim da Sociedade Brasileira de Matematica* **24** No. 2 (1993), 211–232.
19. P. Mormul, M. Zhitomirskii, The structure of the set of singular points of a codimension 1 differential system on a 5-manifold, *Transactions of AMS* **342** No. 2 (1994), 619–629.
20. M. Zhitomirskii, Differential forms and vector fields with a manifold of singular points, *Matematica Contemporanea (Brazil)* **5** (1993), 205–216.
21. M. Zhitomirskii, Normal forms of symmetric Hamiltonian systems, *Journal of Differential Equations* **111** No. 1, (1994), 58–78.
22. B. Jakubczyk, M. Zhitomirskii, Singularities and normal forms of generic 2-distributions on 3-manifolds, *Studia Matematica* **113** No. 3 (1995), 223–248.
23. M. Zhitomirskii, Rigid and abnormal line subdistributions of 2-distributions, *Journal of Dynamical and Control Systems* **1** No. 2 (1995), 253–294.
24. I. Zelenko, M. Zhitomirskii, Rigid curves of generic 2-distributions on 3-manifolds, *Duke Math. Journal* **79** No. 2, (1995), 281–307.
25. M. Zhitomirskii, Singularities and normal forms of smooth distributions, *Banach Center Publications* **32** (1995), 379–409.
26. W. Respondek, M. Zhitomirskii, Feed-back classification of nonlinear control systems on 3-manifolds, *Mathematics of Control, Signals, and Systems* **8** (1996), 299–333.
27. P. Mormul, M. Zhitomirskii, Modules of vector fields, differential forms and degenerations of differential systems, *Israel Journal of Mathematics* **95** (1996), 411–428.
28. B. Jakubczyk, M. Zhitomirskii, Odd-dimensional Pfaffian equations: reduction to the hypersurface of singular points, *C.R. Acad. Sci. Paris* **325**, Series 1 (1997), 423–428.
29. M. Zhitomirskii, W. Respondek, Simple germs of corank one affine distributions, *Banach Center Publications* **44** (1998), 269–276.
30. J.-P. Dufour, M. Zhitomirskii, Classification of non-resonant Poisson structures, *J. London Math. Soc.* **60** (2) (1999), 935–950.
31. J. Sotomayor, M. Zhitomirskii, On pairs of foliations defined by vector fields, *Discrete and Continuous Dynamical Systems* **6** No. 3 (2000), 741–749.
32. M. Zhitomirskii, Darboux and Martinet theorems in control theory, *Singularities et Geometrie Sous-Riemannienne, Travaux en Cours* **62**, Hermann, Paris, (2000), 161–163.
33. B. Jakubczyk, M. Zhitomirskii, Singular 3-dimensional contact structures, *Singularities et Geometrie Sous-Riemannienne, Travaux en Cours* **62**, Hermann, Paris, (2000), 77–87.
34. B. Jakubczyk, M. Zhitomirskii, Local Reduction Theorems and Invariants for Singular Contact Structures, *Ann. Inst. Fourier* **51** No. 1, (2001).

35. J. P. Dufour, M. Zhitomirskii, Singularities and bifurcations of 3-dimensional Poisson structures, *Israel Journal of Mathematics* **121** (2001), 199–220.
36. J. Sotomayor, M. Zhitomirskii, Impasse singularities of differential systems of the form  $A(x)\dot{x} = F(x)$ , *J. Differential Equations* **169** No. 2 (2001), 567–587.
37. R. Montgomery, M. Zhitomirskii, Geometric approach to Goursat flags, *Annales de l'Institut Henri Poincaré. Analyse non linéaire* **18** No. 4 (2001), 459–493.
38. J. Llibre, J. Sotomayor, M. Zhitomirskii, Impasse bifurcations of constrained systems, *Fields Inst. Communications* **31** (2002), 235–255.
39. B. Jakubczyk, M. Zhitomirskii, Distributions of corank one and their characteristic vector fields, *Transactions of the AMS* **355** No. 7 (2002), 2857–2883.
40. J. P. Dufour, M. Zhitomirskii, Nambu structures and integrable 1-forms, *Letters in Mathematical Physics* **66** No. 1 (2003), 1–13.
41. M. Zhitomirskii, Completely Symmetric Centers, *Qualitative Theory of Dynamical Systems* **5** (2004), 327–342.
42. W. Domitrz, S. Janeczko, M. Zhitomirskii, Relative Poincaré lemma, contractibility, quasi-homogeneity and vector fields tangent to a singular variety, *Illinois Journal of Mathematics* **48** No. 3 (2004), 803–835
43. M. Zhitomirskii, Relative Darboux theorem for singular manifolds and local contact algebra, *Canadian Journal of Mathematics* **57** No. 6 (2005), 1314–1340
44. M. Zhitomirskii, Exact normal form for (2,5) distributions, *in: Development of Cartan Geometry and Related Mathematical Problems, Proceedings of RIMS Symposium, Kyoto, Japan, 2006 (Ed. Tohru Morimoto), 16–28.*
45. M. Zhitomirskii, Curves in foliated plane and related problems, *Proceedings of the Steklov Inst. Math., 2007, Vol. 259 (Arnold-70 Jubilee volume), 281 - 293.*
46. W. Domitrz, S. Janeczko, M. Zhitomirskii, Symplectic singularities of varieties: the method of algebraic restrictions, *to appear in Journal für die Reine und Angewandte Mathematik*
47. M. Zhitomirskii, Fully simple singularities of plane and space curves, *to appear in the Proceedings of the London Mathematical Society, 2008.*  
*doi: 10.1112/plms/pdn001.*

### Submitted for Publication

48. M. Zhitomirskii, Germs and multigerms of Legendrian curves, *Israel Journal of Mathematics*.
49. R. Montgomery, M. Zhitomirskii, Points and curves in the monster tower, *Memoirs of AMS*.

### Book

50. M. Zhitomirskii, *Typical Singularities of Differential 1-Forms and Pfaffian Equations*, Transl. of Math. Monographs, Vol. 113, AMS, 1992, 170 pages.