LIST OF PUBLICATIONS OF GIOVANNI COLOMBO

46) G. Colombo, Khai T. Nguyen, Luong V. Nguyen, Non-Lipschitz points and the *SBV* regularity of the minimum time function, preprint (23 pages).

45) G. Colombo, V. V. Goncharov, Brownian motion and exposed solutions of differential inclusions (Dedicated to A. Cellina for his 70th birthday), (2012), *NoDEA*, in print (21 pages).

44) G. Colombo, R. Henrion, Nguyen D. Hoang, B. S. Mordukhovich, Optimal control of the sweeping process, *Dynamics of Continuous, Discrete and Impulsive Systems – B* 19 (2012), 117-159.

43) G. Colombo, Khai T. Nguyen, On the minimum time function around the origin, *Mathematics of Control and Related Fields*, in print.

42) G. Colombo, A. Marigonda, P. Wolenski, The Clarke generalized gradient for functions whose epigraph has positive reach, *Mathematics of Operations Research*, in print.

41) G. Colombo, M. Fečkan, B. M. Garay, Inflated deterministic chaos and Smale's horseshoe, *J. Difference Eq. Applic.* iFirst article (2011), 1-18, DOI: 10.1080/10236198.2010.510139.

40) G. Colombo, V. Goncharov, B. Mordukhovich, Well-posedness of minimal time problems with constant dynamics in Banach spaces, *Set-Valued Variat. Anal.* 18 (2010), 349-372.

39) G. Colombo, L. Thibault, Prox-regular sets and applications, in *Handbook of Nonconvex Analysis*, D.Y. Gao, D. Motreanu eds., International Press (2010), ISBN: 978-1-57146-200-8.

38) G. Colombo, Khai T. Nguyen, On the structure of the minimum time function, *SIAM J. Control* 48 (2010), 47764814.

37) G. Colombo, Khai T. Nguyen, Quantitative isoperimetric inequalities for a class of nonconvex sets, *Calc. Var. PDE's* 37 (2010), 141-166, DOI: 10.1007/s00526-009-0256-z.

36) G. Colombo, M. Fečkan, B. Garay, Multivalued perturbations of a saddle dynamics, *Diff. Eq. Dyn. Syst.* 18 (2010), 29-56.

35) G. Colombo, A. Marigonda, Singularities for a class of non-convex sets and functions, and viscosity solutions of some Hamilton-Jacobi equations, *J. Convex Anal.* 15 (2008), 105-129.

34) G. Colombo, A. Marigonda, P. Wolenski, Some new regularity properties for the minimal time function, *Siam J. Control* 44 (2006), 2285-2299.

33) G. Colombo, A. Marigonda, Differentiability properties for a class of non-Lipschitz functions, *Calc. Var. PDE's* 25 (2006), 1-31.

32) G. Colombo, P. R. Wolenski, Variational analysis for a class of minimal time functions in Hilbert spaces, *J. Convex Analysis* 11 (2004), 335-361.

31) G. Colombo, P.R. Wolenski, The subgradient formula for the minimal time function in the case of constant dynamics in Hilbert space, *J. Global Optimization* 3-4 (2004) 269-282.

30) G. Colombo, P. Dai Pra, V. Křivan, I. Vrkoč, Stochastic processes for bounded noise, *Mathematics of Control, Signals, and Systems (MCSS)* 16 (2003), 95-119.

29) G. Colombo, M. D.P. Monteiro Marques, Sweeping by a continuous φ-convex set, *J. Differ. Equations* 187 (2003), 46-72.

28) G. Colombo, V. Goncharov, Continuous selections via geodesics, *Topological Methods in Nonlin. Anal.* 18 (2001), 171-182.

27) G. Colombo, P. Dai Pra, A class of piecewise deterministic Markov processes, *Markov Processes and Related Fields*, 7 (2001), 251-287.

26) G. Colombo, V. Goncharov, Variational inequalities and regularity properties of closed sets in Hilbert spaces, *J. Convex Anal.* 8 (2001), 197-222.

25) G. Colombo, V. Goncharov, The sweeping processes without convexity, *Set-Valued Anal.* 7 (1999), 357-374.

24) V. Křivan, G. Colombo, A non-stochastic approach for modeling uncertainty in population dynamics, *Bull. Math. Biol.* 60 (1998), 721-751.

23) T. Cardinali, G. Colombo, F. Papalini, M.Tosques, On a class of evolution equations without convexity, *Nonlinear Analysis: Theory, Meth. Appl.* 28 (1997), 217-234.

22) G. Colombo, V. Goncharov, E. Ramazzina, On a class of nonconvex and nonlinear optimal control problems, *Nonlinear Diff. Equations and Appl. (NoDEA)* 3 (1996), 115-126.

21) G. Colombo, V. Goncharov, Existence for a non-convex optimal control problem with a nonlinear dynamics, *Nonlinear Analysis: Theory, Meth. Appl.* 24 (1995), 795-800.

20) G. Colombo, B. Garay, Existence results for infinite dimensional differential equations without compactness, *Rend. Sem. Mat. Univ. Padova* XCII (1994), 127-133.

19) G. Colombo, V. Křivan, Robustness of viability controllers under small perturbations, *J. of Optimization Theory and Appl.* 83 (1994), 207-215.

18) A. Bressan, G. Colombo, Boundary value problems for lower semicontinuous differential inclusions, *Funkcial. Ekvac.* 36 (1993), 359-373.

17) G. Colombo, V. Křivan, A viability algorithm, *J. Diff. Equations* 102 (1993), 236-243.

16) G. Colombo, On extremal solutions of differential inclusions, *Bull. Polish Acad. Sci.*, 40 (1992), 97-109.

15) G. Colombo, V. Křivan, Fuzzy differential inclusions and nonprobabilistic likelihood, *Dynamic Systems and Applications* 1 (1992), 419-440.

14) A. Bressan, G. Colombo, Selections and representations of multifunctions in paracompact spaces, *Studia Math.* 103 (1992), 209-216.

13) G. Colombo, Weak flow-invariance for non-convex differential inclusions, *Differential and Integral Equations* 5, (1992), 173-180.

12) G. Colombo, M. Tosques, Multivalued perturbations for a class of nonlinear evolution equations, *Ann. di Mat. Pura Appl.* CLX (1991).

11) F. Ancona, G. Colombo, Existence of solutions for a class of non-convex differential inclusions, *Rend. Sem. Mat. Univ. Padova* 83 (1990), 71-76.

10) A. Bressan, G. Colombo, Existence and continuous dependence for discontinuous O.D.E.'s, *Boll. Un. Mat. Ital.* (7) 4-B (1990), 295-311.

9) A.Cellina, G. Colombo, On a classical problem of the calculus of variations without convexity assumptions, *Ann. Inst. H. Poincaré, Analyse Nonlinéaire* 7 (1990), 97-106.

8) A.Cellina, G. Colombo, An existence result for differential inclusions with non-convex right-hand side, *Funkcial. Ekvac.* 32 (1989), 407-416.

7) A.Bressan, A. Cellina, G. Colombo, Upper semicontinuous differential inclusions without convexity, *Proc. Am. Math Soc.* 106 (1989), 771-775.

6) G. Colombo, Approximate and relaxed solutions of differential inclusions, *Rend. Sem. Matem. Univ. Padova* 81 (1989), 229-238.

5) A. Bressan, G. Colombo, Generalized Baire category and differential inclusions in Banach spaces, *Journal Differ. Equat.* 76 (1988),135-158.

4) A. Bressan, G. Colombo, Extensions and selections of maps with decomposable values, *Studia Mathematica* 90 (1988), 69-86.

3) G. Colombo, A. Fonda, A. Ornelas, Lower semicontinuous perturbations of maximal monotone differential inclusions, *Isr. J. Mathematics* 61 (1988), 211-218.

2) A. Cellina, G. Colombo, A. Fonda, A continuous version of Liapunov's convexity theorem, *Ann. Inst. H. Poincaré, Analyse Nonlinéaire* 5 (1988), 23-36.

1) A. Cellina, G. Colombo, A. Fonda, Approximate selections and fixed points for upper semicontinuous maps with decomposable values, *Proc. Am. Math. Soc.* 98 (1986), 663- 666.

PROCEEDINGS

A) G. Colombo, Directionally continuous selections and lower semicontinuous differential inclusions, ottobre 1991, in "Set-valued analysis and differential inclusions", ed. A. B. Kurzhanski e V. M. Veliov, Birkhäuser, Basel (1993), 61-73.

B) G. Colombo, A class of upper semicontinuous differential inclusions without convexity, in "Proceedings of World Congress of Nonlinear Analysts", ed. V. Lakshmikantham, De Gruyter (1996), 2107-2113.

C) G. Colombo, V. Goncharov, The sweeping processes without convexity, in "International Conference on Differential Equations, Vol. 1, 2 (Berlin, 1999)" (Proceedings of EQUADIFF 99), World Sci. Publ., River Edge, NJ (2000), 494-496.

D) G. Colombo, P.R. Wolenski, Subdifferential and regularity properties of the minimum time function: an analysis for a constant dynamics in finite dimensions, Proceedings of the Conference on Decision and Control, Las Vegas (2002), 1117-1122.

E) G. Colombo, P.R. Wolenski, The subgradient formula for the minimal time function with linear dynamics and convex target, Proceedings of the IFAC Conference on Intelligent control systems and signal processing, Faro (2003), 6 pp.

LECTURE NOTES:

I) G. Colombo, Notes on differential equations under Carathéodory conditions (from the lectures delivered at S.I.S.S.A., academic year 1989-90), S.I.S.S.A., SEPTEMBER 1990 (62 pp.).