

LIST OF PUBLICATIONS OF GIOVANNI COLOMBO

- 61) G. Colombo, N. Khalil, F. Rampazzo, Optimal control with state constraints: Lie brackets and rotational strategies, in preparation.
- 60) G. Colombo, P. Gidoni, E. Vilches, Stabilization of periodic sweeping processes and asymptotic average velocity for soft locomotors with dry friction, *Discr. Cont. Dyn. Syst.*, in print.
- 59) Tan H.Cao, G. Colombo, B. S. Mordukhovich, D. Nguyen, Optimization of fully controlled sweeping processes, *J. Diff. Eq.* 295 (2021), 138–186.
- 58) Tan H.Cao, G. Colombo, B. S. Mordukhovich, D. Nguyen, Optimization and discrete approximation of sweeping processes with controlled moving sets and perturbations, *J. Diff. Eq.* 274 (2021), 461–509.
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- 56) G. Colombo, B. S. Mordukhovich, Dao Nguyen, Optimization of a perturbed sweeping process by constrained discontinuous controls, *SIAM J. Control* 58 (2020), 2678–2709.
- 55) M. Sychev, G. Treu, and G. Colombo, Stable minimizers of functionals of the gradient, *Proc. Royal Soc. Edinburgh* 150 (2020), 2642–2655.
- 54) G. Colombo, Ch. Kozaily, Existence and Uniqueness of Solutions for an Integral Perturbation of Moreaus Sweeping Process, *J. Convex Anal.* 27 (2020), 229-238.
- 53) G. Colombo, B. Mordukhovich, Dao Nguyen, Optimal control of sweeping processes in robotics and traffic flow models. *J. Optim. Theory Appl.* 182 (2019), 439-472.
- 52) Ch. E. Arroud, G. Colombo, A Pontryagin maximum principle for the controlled sweeping process, *Set-Val. Var. Anal.* 26 (2018), 607-629. DOI 10.1007/s11228-017-0400-4.
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- 48) G. Colombo, Thuy T.T. Le, Higher order discrete controllability and the approximation of the minimum time function, *Discr. Cont. Dyn. Systems Ser. A* 35 (2015), 4293-4322.
- 47) G. Colombo, R. Henrion, Nguyen D. Hoang, B. S. Mordukhovich, Discrete approximations of a controlled sweeping process, *Set-Valued Variat. Anal.* 23 (2015), 69-86.
- 46) G. Colombo, Khai T. Nguyen, Luong V. Nguyen, Non-Lipschitz points and the SBV regularity of the minimum time function, *Calc. Var. PDE’s* DOI 10.1007/s00526-013-0682-9 (2013), 51 (2014), 439-463.
- 45) G. Colombo, V. V. Goncharov, Brownian motion and exposed solutions of differential inclusions (Dedicated to A. Cellina for his 70th birthday), *NoDEA* 20 (2013), 323-343.
- 44) G. Colombo, Khai T. Nguyen, On the minimum time function around the origin, *Mathematics of Control and Related Fields* 3 (2013), 51-82.
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- 42) 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.
- 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.
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- 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.
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- 12) G. Colombo, M. Tosques, Multivalued perturbations for a class of nonlinear evolution equations, *Ann. di Mat. Pura Appl.* CLX (1991).
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- 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.
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- 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.
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- F) Ch.E. Arroud and G. Colombo, Necessary conditions for a nonclassical control problem with state constraints, Proceeding of 20th IFAC World Congress, Toulouse (2017), 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.).

OTHER PUBLICATIONS:

I) G. Colombo, C. Mariconda, F. Rampazzo, G. Treu, Preface *NoDEA* 20 (2013), 149-150.