

List of Recent Publications of Tzanko Donchev

Papers published in refereed journals:

22. Asymptotic and Oscillatory Behavior of n -th Order Forced Differential Equations with "Maxima", PanAmerican Math. J. **20** (2010) 37–51 (with S. Hristova and N. Markova,).
21. Stability for the Solutions of Parabolic Equations with "Maxima", Pan-Amer. Math. J. – to appear (with N. Kitanov and D. Kolev).
20. On the Theorem of Filippov – Pliś and Some Applications, Control and Cybernetics **38** (2009) 1251–1271. (with E. Farkhi).
19. Discrete Approximation of Impulsive Differential Inclusions, Num. Funct. Anal. Opt. – to appear (with R. Baier)
18. Minimal time function and Hamilton-Jacobi inequalities, Int. J. Math. Stat. **6** (2009) 14-24.
17. Extensions of Clarkes proximal characterization for reachable mappings of differential inclusions, J. Math. Anal. Appl. **348** (2008) 454–460 (with A. Dontchev).
16. Fixed Time Impulsive Differential Inclusions, Surv. Math. Appl. **2** (2007) 1-9.
15. Discrete approximations, relaxation, and optimization of one-side Lipschitzian differential inclusions in Hilbert spaces, J. Diff. Eqns. **243** (2007) 301-328 (with E. Farkhi and B. Mordukhovich).
14. Discrete Approximations and Fixed Set Iterations in Banach Spaces, SIAM Journal Optimization **18** (2007) 895-906 (with E. Farkhi and S. Reich).
13. Impulsive differential inclusions with constraints, EJDE Vol. 2006(2006), No. 66, pp. 1-12.
12. Strong invariance for discontinuous differential inclusions in a Hilbert space, An. Stiint. Univ. "A. Cuza" Iasi, Tomul LI, S. I-a, Matematica, (2005), f.2, 265-279 (with V. Rios and P. Wolenski).
11. Averaging of functional differential inclusions in Banach spaces, J. Math. Anal. Appl. **311** (2005) 402-415 (with G. Grammel)
10. Strong Invariance and one-sided Lipschitz multifunctions, Nonlinear Analysis TMA **60** (2005) 849-862 (with V. Rios and P. Wolenski)
9. Averaging of Perturbed One Sided Lipschitz Differential Inclusions, ZAA **23** (2004) 1-10 (with M. Kamenskii and M. Quincampoix)
8. Surjectivity and Fixed Points of Relaxed Dissipative Multifunctions. Differential Inclusions Approach, J. Math. Anal. Appl. **299** (2004) 525-533
7. Upper Semicontinuous Functional Differential Inclusions, Math. Balkanica **18** (2004) 141-147.
6. A Two Point Boundary Value Problem for a Class of Differential Inclusions, Journal of Nonlinear and Convex Analysis, **5** N. 1 (2004) 59-69 (with M. Quincampoix)
5. Characterizations of Reachable Sets for a Class of Differential Inclusions, Functional Differential Equations, **10** (2003) 473-483 (with E. Farkhi and P. Wolenski)
4. Singular perturbations in infinite dimensional control systems, SIAM J. Control and Optim. **42** (2003) 1795 - 1812 (with A. Dontchev)
3. On non-emptiness of viability kernels for infinite dimensional differential inclusions, Appl. Math. Lett. **16** (2003) 1195-1199 (with M. Quincampoix)

2. Fixed Set Iterations for Relaxed Lipschitz Multi-maps, *Nonlinear Analysis* **53** (2003) 997-1015. (with E. Farkhi and S. Reich)

1. Relaxed Sub-monotone Mappings, *Abstract and Applied Analysis*, v. **2003** (2003) 19-31. (with P. Georgiev)

Papers published in other periodicals:

8. Exponential Formula for Impulsive Differential Inclusions, Margenov et al (Eds.) *LNCS* **5910** Springer 2010, 266-273.

7. Approximation of the Solution Set of Impulsive Systems, S. Margenov et al (Eds.) *LNCS* **4818** Springer 2008, 309-316.

6. Averaging of evolution inclusions in Banach spaces, *Applied Analysis and Differential Equations*, Editors: Ovidiu Carja and Ioan Vrăbie, World Scientific 2007, 69-78.

5. Discrete Approximations of Singularly Perturbed Systems, S. Dimova et al (Eds.) *LNCS* **4310** 304-311, Springer 2006. (with V. Lupulescu)

4. Approximation of the Solution Set of Optimal Control Problems, I. Lirkov, S. Margenov, J. Wasniewski (Eds.) *LNCS* **3743** Springer 2006, 216-222

3. Generic Properties of Differential Inclusions and Control Problems, Z. Li et al. (Eds.) *NAA* 2004, *LNCS* **3401** (2005) 266-271, Springer, Berlin

2. One Sided Lipschitz Multifunctions and Applications, Proceedings of the Louisiana mathematical control theory conference, in *Optimal Control, Stabilization and Nonsmooth Analysis*, de Querioz, Malisoff, Wolenski (Eds.), *Lect. Notes Contr. Inf. Sci.* **301**, Springer, Berlin, 2004, pp. 333-342.

1. A characterization of strong invariance for perturbed dissipative systems, Proceedings of the Louisiana mathematical control theory conference, *Stabilization and Nonsmooth Analysis*, de Querioz, Malisoff, Wolenski editors, *Lect. Notes Contr. Inf. Sci.* **301**, Springer, Berlin, 2004, pp. 343-350 (with V. Rios and P. Wolenski).