

Faculty Research for 2009

1. B. Belinskiy, P. Caithamer. Existence Criteria for Solutions of Linear Stochastic Differential Equations with Skew-Symmetric Differential Operator and Additive Fractional Brownian Noise, *Stochastics and Dynamics* Vol. 9, No. 1, 153-167. 2009.
2. B. Belinskiy, O. Saleh and T. Walters. A Double Sum with the Gamma Function, *The College Mathematics Journal*, Vol. 40, No. 1, 59-60. 2009.
3. S.A. Avdonin, B. Belinskiy, and S.A. Ivanov. On Controllability of an Elastic Ring, *Applied Mathematics and Optimization* Vol. 60, No. 1, 71-103. 2009.
4. B. Belinskiy, J. V. Matthews. Some Nonlinear and Nonlocal Sturm-Liouville Problems Motivated by the Problem of Flutter, *E. J. Qualitative Theory of Diff. Equations*, Spec. Ed. I, No. 7, 1-15. 2009.
5. John R. Graef, Lingju Kong, and Bo Yang, Existence of solutions for a higher order multi-point boundary value problem, *Result. Math.* 53 (2009), 77–101.
6. John R. Graef, Lingju Kong, and Bo Yang, Positive solutions of a nonlinear higher order boundary value problem, *Discrete Contin. Dyn. Syst. suppl.* (2009), 276–285.
7. Lingju Kong and Qingkai Kong, Nodal solutions of second order nonlinear boundary value problems, *Math. Proc. Camb. Phil. Soc.* 146 (2009), 747–763.
8. Lingju Kong and Qingkai Kong, Uniqueness and parameter-dependence of solutions of second order boundary value problems, *Appl. Math. Lett.* 22 (2009), 1633–1638.
9. Lingju Kong and Qingkai Kong, Existence of nodal solutions of multi-point boundary value problems, *Discrete Contin. Dyn. Syst. suppl.* (2009), 457–465.
10. Lingju Kong, Daxiong Piao, and Linshan Wang, Positive solutions for third order boundary value problems with p -Laplacian, *Result. Math.* 55 (2009), 111–128.
11. Jeremy Chamberlain, Lingju Kong, and Qingkai Kong, Nodal solutions of nonlocal boundary value problems, *Math. Model. Anal* 14 (2009), 435–450.
12. Zengji Du and Lingju Kong, Existence of three solutions for systems of multipoint boundary value problem, *Electron. J. Qual. Theory Diff. Equ. Spec. Ed. I*, No. 10 (2009), 1-17.
13. John R. Graef and Lingju Kong, Existence results for nonlinear periodic boundary value problems, *Proc. Edinburgh Math. Soc.* 52 (2009), 79–95.
14. John R. Graef and Lingju Kong, Positive solutions for third order semipositone boundary value problems, *Appl. Math. Lett.* 22 (2009), 1154–1160.
15. John R. Graef, Lingju Kong, and Qingkai Kong, Existence of three solutions of a higher order boundary value problem, *Electron. J. Differential Equations*, Conf. 17 (2009), 71–80.

16. J. Graef and A. Ouahab, Global existence and uniqueness results for impulsive functional differential equations with variable times and multiple delays, *Dynamics of Continuous, Discrete and Impulsive Systems Series A: Mathematical Analysis* 16 (2009), 27-40.
17. R.P. Agarwal, S.R. Grace, J.R. Graef, Oscillation criteria for certain third order nonlinear difference equations, *Applicable Analysis and Discrete Mathematics* 3 (2009), 27-38.
18. J. Graef and A. Ouahab, Structure of solutions sets and a continuous version of Filippov's theorem for first order impulsive differential inclusions with periodic conditions, *Electronic Journal of Qualitative Theory of Differential Equations* 2009, No. 24, 1-23.
19. J.R. Graef and J.R.L. Webb, Third order boundary value problems with nonlocal boundary conditions, *Nonlinear Analysis Series A: Theory, Methods and Applications* 71 (2009), 1542-1551.
20. R.P. Agarwal, S.R. Grace, J.R. Graef, Oscillation theorems for fourth order functional differential equations, *Journal of Applied Mathematics and Computing* 30 (2009), 75-88.
21. J. Graef and T. Moussaoui, Positive solutions for discrete boundary value problems, *Dynamic Systems and Applications* 18 (2009), 265-274.
22. J. Graef, J. Henderson, B. Yang, Existence of positive solutions of a higher order nonlocal singular boundary value problem, *Dynamics of Continuous, Discrete and Impulsive Systems Series A Mathematical Analysis* 16 (2009), Proceedings of 6th International Conference on Differential Equations and Dynamical Systems, Supplement S1, 147-152.
23. B. Ahmad and J. Graef, Coupled systems of nonlinear fractional differential equations with nonlocal boundary conditions, *PanAmerican Mathematical Journal* 19 (2009), 29-39.
24. J. Graef and T. Moussaoui, A class of nth order BVPs with nonlocal conditions, *Computers & Mathematics with Applications* 58 (2009), 1662-1671.
25. J. Graef, J. Henderson, B. Yang, Positive solutions to a fourth order three point boundary value problem, Proceedings of the Seventh AIMS International Conference on Dynamical Systems, Differential Equations, and Applications, *Discrete and Continuous Dynamical Systems, Supplement* 2009, 269-275.