

## **Faculty Research 2010**

- 1) **John R. Graef, Lingju Kong, and F. M. Minhos**, Higher order phi-Laplacian BVP with generalized Sturm-Liouville boundary conditions, *Differ. Equ. Dyn. Syst.* 18 (2010), 373-383.
- 2) **Zengji Du and Lingju Kong**, Asymptotic solutions of singularly perturbed second-order differential equation and applications to multi-point boundary value problems, *Appl. Math. Lett.* 23 (2010), 980-983.
- 3) **John R. Graef, Lingju Kong, and Bo Yang**, Positive solutions to a nonlinear third order three-point boundary value problem, *Electron. J. Differential Equations, Conf.* 19 (2010), 151-159.
- 4) **Lingju Kong and Qingkai Kong**, Asymptotics of eigenvalues for half-linear Sturm-Liouville problems, *Proceedings of Neural, Parallel & Scientific Computations, Volume 4* (2010), 215-220.
- 5) **John R. Graef, Lingju Kong, and Qingkai Kong**, Ambrosetti-Prodi-type results for a third order multi-point boundary value problem, *Nonlinear Stud.* 17 (2010), 121-130.
- 6) **John R. Graef and Lingju Kong**, Periodic solutions for functional differential equations with sign-changing nonlinearities, *Proc. Royal. Soc. Edinburgh* 140A (2010), 597-616.
- 7) **Abdulkadir Dogan, John R. Graef, and Lingju Kong**, Higher order semipositone multi-point boundary value problems on time scales, *Comput. Math. Appl.* 60 (2010), 23-35.
- 8) **John R. Graef, Lingju Kong, Qingkai Kong, and James S. W. Wong**, Higher order multi-point boundary value problems with sign-changing nonlinearities and nonhomogeneous boundary conditions, *Electron. J. Qual. Theory Diff. Equ.*, No. 28 (2010), 1-40.
- 9) **Lingju Kong**, Positive periodic solutions for systems of functional differential equations, *Commun. Appl. Anal.* 14 (2010), 137-154.
- 10) **Lingju Kong and James S. W. Wong**, Positive solutions for multi-point boundary value problems with nonhomogeneous boundary conditions, *J. Math. Anal. Appl.* 367 (2010), 588-611.
- 11) **John R. Graef, Lingju Kong, and Bo Yang**, Positive solutions for third order multi-point singular boundary value problems, *Czechoslovak Math. J.* 60 (2010), 173-182.
- 12) **Lingju Kong**, Second order singular boundary value problems with integral boundary conditions, *Nonlinear Anal.* 72 (2010), 2628--2638.
- 13) **Lingju Kong and Qingkai Kong**, Higher order boundary value problems with nonhomogeneous boundary conditions, *Nonlinear Anal.* 72 (2010), 240-261.
- 14) **Lingju Kong, Qingkai Kong and James S. W. Wong**, Nodal solutions of multi-point boundary value problems, *Nonlinear Anal.* 72 (2010), 382-389.
- 15) **Gunasekera, S. and Ananda, M. M. A.** Generalized Inferences for the Common Scale Parameter of Several Pareto Populations. *International Journal of Statistics and Management System* 5(1-2) (2010), 118-126.
- 16) **Cooray, K., Gunasekera, S., and Ananda M. M. A.** The Weibull and Inverse Weibull Composite Distribution for Modeling Reliability Data. *Model Assisted Statistics and Applications* 5(2) (2010), 109-115.
- 17) **Henning, Michael A.; van der Merwe, Lucas C.** Properties of total domination edge-critical graphs. *Discrete Appl. Math.* 158 (2010), no. 2, 147-153.
- 18) **M. Benchohra, John R. Graef, and S. Hamani**, Existence results for boundary value problems with nonlinear fractional differential inclusions and integral conditions, *Electronic Journal of Differential Equations* Vol. 2010 (2010), No. 20, pp. 1-16.

- 19) **M. Bartusek and John R. Graef**, Strong nonlinear limit point/limit-circle properties for second order differential equations with delay, *PanAmerican Mathematical Journal* 20 (2010), 31–49.
- 20) **B. C. Dhage and John R. Graef**, On stability of abstract measure delay integro-differential equations, *Dynamic Systems and Applications* 19 (2010), 323–334.
- 21) **John R. Graef, S. Padhi, and S. Srivastava**, Dynamics of a Fishing Model, *Neural, Parallel and Scientific Computations* 18 (2010), 109–120.
- 22) **D. R. Anderson and John R. Graef**, Sturm-Picone comparison theorem for matrix systems on time scales, *Applicable Analysis and Discrete Mathematics* 4 (2010), 338–346.
- 23) **M. Benchohra, John R. Graef, and F-Z. Mostefai**, Weak solutions for nonlinear fractional differential equations on reflexive Banach spaces, *Electronic Journal of Qualitative Theory of Differential Equations* 2010 (2010) No. 54, pp. 1–10.
- 24) **John R. Graef, V. Muthulakshmi, and E. Thandapani**, Classifications of solutions of second order nonlinear neutral delay differential equations with positive and negative coefficients, *International Journal of Pure and Applied Mathematics* 64 (2010), 159–170.
- 25) **John R. Graef, S. Murugadass, and E. Thandapani**, Oscillation criteria for second order neutral delay differential equations with mixed nonlinearities, *International Electronic Journal of Pure and Applied Mathematics* 1 (2010), 85–99.
- 26) **M. Bartusek and John R. Graef**, Asymptotic properties of second order differential equations with delay, *Mathematics in Engineering, Science and Aerospace* (2010), 337–349.
- 27) **John R. Graef and S. H. Saker**, New oscillation criteria for generalized second-order nonlinear neutral functional differential equations, *Dynamic Systems and Applications* 19 (2010), 455–472.
- 28) **B. C. Dhage and John R. Graef**, Quadratic perturbations of second order periodic boundary value problems for hybrid ordinary differential equations, *International Electronic Journal of Pure and Applied Mathematics* 2 (2010), 189–209.
- 29) **John R. Graef and Y. Liu**, Existence of solutions of Dirichlet boundary value problems for higher order difference equations on an infinite interval, *Communications on Applied Nonlinear Analysis*, 17 (2010), 25–41.
- 30) **S. A. Avdonin, Boris Belinskiy and L. Pandolfi**, Controllability of a inhomogeneous String and Ring under Time Dependent Tension, *Mathematical Modeling of Natural Phenomena* 5, No. 4, 4-31 (2010).
- 31) **Mike Henning and Lucas Van der Merwe**, Properties of total domination edge-critical graphs, *Discrete Applied Mathematics*, 158 (2010), no. 2, 147-153.
- 32) **Johannes Hattingh, Ossama Saleh, Terry Walters and Lucas Van der Merwe**, Nordhaus-Gaddum results for the sum of the induced path number of a graph and its complement, submitted (December 2010), *Acta Mathematica Sinica, English Series*.
- 33) Aniekan A. Ebiefung. Choice of Technology, Industrial Pollution Model, and the Vertical Linear Complementarity Problem. *Global Journal of Mathematical Sciences*. Vol. 9, No. 2, 113 – 120, 2010.