

## Faculty Research for 2008

1. Karman, S. L. and Betro, V., "Parallel Hierarchical Unstructured Mesh Generation with General Cutting," AIAA-2008-0918, Reno, NV, Jan. 2008.
2. B. Belinskiy, T.V. Savin. The Schwarz Reflection Principle for Harmonic Functions in  $R^2$  Subject to the Robin Condition, *J. Math Analysis and Applications* Vol. 348, 685-691. 2008.
3. John R. Graef, Lingju Kong, and Haiyan Wang, A periodic boundary value problem with vanishing Green's function, *Appl. Math. Lett.* 21 (2008), 176–180.
4. John R. Graef, Lingju Kong, and Haiyan Wang, Existence, multiplicity, and dependence on a parameter for a periodic boundary value problems, *J. Differential Equations* 245 (2008), 1185–1197.
5. John R. Graef and Lingju Kong, Nontrivial solutions of periodic boundary value problems, *Proceedings of Dynamic Systems and Applications*, Volume 5 (2008), 192–197.
6. John R. Graef and Lingju Kong, Necessary and sufficient conditions for existence of symmetric positive solutions of multi-point boundary value problems, *Nonlinear Anal.* 68 (2008), 1529–1552.
7. John R. Graef and Lingju Kong, Solutions of second order multi-point boundary value problems, *Math. Proc. Camb. Phil. Soc.* 145 (2008), 489–510.
8. Lingju Kong and Qingkai Kong, Right-indefinite half-linear Sturm-Liouville problems, *Comput. Math. Appl.* 55 (2008), 2554–2564.
9. J. Graef and B. Yang, Positive solutions of a third order nonlocal boundary value problem, *Discrete and Continuous Dynamical Systems Series S* 1 (2008), 89-97.
10. J. Graef and A. Ouahab, Extremal solutions for nonresonance impulsive functional dynamic equations on time scales, *Applied Mathematics and Computation* 196 (2008), 333-339.
11. M. Bartušek and J. Graef, Strong nonlinear limit-point/limit-circle properties for forced Thomas-Fermi equations with p-Laplacian, *PanAmerican Mathematical Journal* 18 (2008), 73-88.
12. J. Graef and B. Yang, Existence and nonexistence of positive solutions of a nonlinear third order boundary value problem, *Electronic Journal of Qualitative Theory of Differential Equations*, Proceedings of the Eighth Colloquium on the Qualitative Theory of Differential Equations, 2008, No. 9, 1-13.
13. M. Bartušek and J. Graef, Nonlinear limit-point/limit-circle properties of solutions of second order differential equations with P-Laplacian, *International Journal of Pure and Applied Mathematics* 45 (2008), 501-518.

14. J.R. Graef, A.A. Martynyuk, and I. P. Stavroulakis, Personage in science: Professor Myron K. Grammatikopoulos, *Nonlinear Dynamics and Systems Theory* 8 (2008), 217-220.
15. M. Bartušek and J. Graef, The strong nonlinear limit-point/limit-circle properties for a class of even order equations, *Communications on Applied Nonlinear Analysis* 15 (2008), 29-45.
16. J. Graef, J. Henderson, B. Yang, Existence and nonexistence of positive solutions of an  $n$ -th order nonlocal boundary value problem, *Proceedings of Dynamic Systems and Applications* 5 (2008), 186-191.
17. J. Graef, J. Henderson, P. J. Y. Wong, and B. Yang, Three solutions of an  $n$ th order three-point focal type boundary value problem, *Nonlinear Analysis Series A: Theory, Methods and Applications* 69 (2008), 3386-3404.
18. J. Graef, J. Henderson, B. Yang, Positive solutions to a singular third order nonlocal boundary value problem, *Indian Journal of Mathematics* 50 (2008), 317-330.
19. M. Benchohra, J. Graef, S. Hamani, Existence results for boundary value problems with nonlinear fractional differential equations, *Applicable Analysis* 87 (2008), 851-863.
20. J. Graef and A. Ouahab, First order impulsive differential inclusions with periodic conditions, *Electronic Journal of Qualitative Theory of Differential Equations* 2008, No. 31, 1-40.
21. J. Graef and A. Ouahab, Existence results for functional semilinear differential inclusions in Fréchet spaces, *Mathematical and Computer Modelling* 48 (2008), 1708-1718.
22. B.C. Dhage, J.R. Graef, A.V. Deshmukh, On asymptotic behavior of a nonlinear functional integral equation, *Communications on Applied Nonlinear Analysis* 15 (2008), 55-67.
23. J. Graef and A. Ouahab, Nonresonance impulsive functional dynamic boundary value inclusions on time scales, *Nonlinear Studies* 15 (2008), 339-354.
24. Ronald L. Smith, The Positive Definite Completion Problem Revisited, *Linear Algebra and Its Applications*, 429 (2008) 1442-1452.
25. Francesco Barioli, Shaun Fallat and Ronald L. Smith, On Acyclic and Unicyclic Graphs whose Minimum Rank Equals the Diameter, *Linear Algebra and Its Applications*, 429 (2008) 1568-1578.
26. Aniekana A. Ebiefung, Michael Kostreva, and Ishita Majumbar. Disjunctive Programming and Generalized Leontief Input-Output Model. *Journal of Applied Mathematics and Computation* 198, 551—558, 2008.