

Refereed Journal Articles 2005-2010

J Lindquist, J Ma, P van den Driessche, F H Wildeboordse, 2010. Effective degree network disease models, *J. Math. Biology*, DOI 10.1007/s00285-010-0331-2.

F Barioli, W Barrett, SM Fallat, T Hall, L Hogben, B Shader, P van den Driessche, H van der Holst, 2010. Zero forcing parameters and minimum rank problems, *Lin. Alg. Appl.*, 433, 401-411.

R Edwards, S Kim, P van den Driessche, 2010. A multigroup model for a heterosexually transmitted disease, *Math. Biosciences*, 224, 87-94.

M Catral, L Hogben, DD Olesky, P van den Driessche, 2010. Sign patterns that require and allow power positivity, *Elect. J. Lin. Alg.*, 19, 121-128.

A Berman, M Catral, LM DeAlba, A Elhashash, FJ Hall, L Hogben, I-J Kim, DD Olesky, P Tarazaga, MJ Tsatsomeros, P van den Driessche, 2010. Sign patterns that allow eventual positivity, *Elect. J. Lin. Alg.*, 19, 108-120.

L Elsner, P van den Driessche, 2010. Max-algebra and pairwise comparison matrices II, *Lin. Alg. Appl.*, 432, 927-935.

M Catral, DD Olesky, P van den Driessche, 2010. Graphical description of group inverses of certain bipartite matrices, *Lin. Alg. Appl.*, 432, 36-52.

I-J Kim, DD Olesky, B Shader, P van den Driessche, H van der Holst, K Vander Meulen, 2009. Generating potentially nilpotent full sign patterns, *Elec. J. Lin. Alg.*, 19, 162-175.

M Catral, DD Olesky, P van den Driessche, 2009. Allow problems concerning spectral properties of sign pattern matrices: A survey, *Lin. Alg. Appl.*, 430, 3080-3094.

J Lindquist, J Ma, P van den Driessche, FH Willeboordse, 2009. Network evolution by different rewiring schemes, *Physica D*, 238, 370-378.

T. de Camino-Beck, MA Lewis, P van den Driessche, 2009. A graph-theoretic method for the basic reproduction number in continuous time, *J. Math. Biol.*, 59, 503-516.

DD Olesky, MJ Tsatsomeros, P van den Driessche, 2009. M_v matrices: a generalization of M-matrices based on eventually nonnegative matrices, *Elect. J. Lin. Alg.*, 18, 339-351.

M Catral, DD Olesky, P van den Driessche, 2009. Block representations of the Drazin inverse, *Elec. J. Lin. Alg.*, 18, 98-107.

I-J Kim, DD Olesky, P van den Driessche, 2009. Critical sets of inertia for matrix patterns. *Lin.&Mult.Alg.*, 57, 293-306.

L Elsner, DD Olesky, P van den Driessche, 2009. Sufficient conditions for permutation equivalence to a WHS-matrix, *Lin.&Mult.Alg.*, 57, 103-110.

- GR Hosak, PA Rossignol, P van den Driessche, 2008. The control of vector-borne disease epidemics, *J. Theor. Biol.*, 255, 16-25.
- LJS Allen, P van den Driessche, 2008. The basic reproduction number in some discrete time epidemic models. *J. Difference Equ. Appl.*, 14, 1127-1147.
- F Brauer, P van den Driessche, L Wang, 2008. Oscillations in a patchy environment disease model, *Math. Biosciences*, 215, 1-10.
- J Arino, F Brauer, P van den Driessche, J Watmough, J Wu, 2008. A model for influenza with vaccination and antiviral treatment, *J. Theor. Biol.*, 253, 118-130.
- M Catral, DD Olesky, P van den Driessche, 2008. Group inverses of matrices with path graphs, *Elec. J. Lin. Alg.*, 17, 219-233.
- J Ma, P van den Driessche, 2008. Case fatality proportion, *Bull. Math. Biol.*, 70, 118-133.
- L Elsner, P van den Driessche, 2008. Bounds for the Perron root using max eigenvalues, *Lin. Alg. Appl.* 428, 2000-2005.
- G MacGillivray, S Nasserar, DD Olesky, P van den Driessche, 2008. Primitive digraphs with smallest large exponent, *Lin. Alg. Appl.*, 428, 1740-1752.
- M Greer, P van den Driessche, L Wang, GF Webb, 2007. Effects of general incidence and polymer joining on nucleated polymerization in a model of prion proliferation, *SIAM J. of Appl. Math.*, 68, 154-170.
- R Edwards, P van den Driessche, L Wang, 2007. Periodicity in piecewise-linear switching networks with delay, *J. Math. Biology*, 55, 271-298.
- P van den Driessche, X Zou, 2007. Modeling relapse in infectious diseases, *Math. Biosciences*, 207, 89-103.
- P van den Driessche, L Wang, X Zou, 2007. Modeling diseases with latency and relapse, *Math. Biosci. Eng.*, 4, 205-219.
- Y-H Hsieh, P van den Driessche, L Wang, 2007. Impact of travel between patches for spatial spread of disease, *Bull. Math. Biol.*, 69, 1355-1375.
- T Dhirasakdanon, HR Thieme, P van den Driessche, 2007. A sharp threshold for disease persistence in host metapopulations, *J. Biological Dynamics*, 1, 363-378.
- J Arino, R Jordan, P van den Driessche, 2007. Quarantine in a multi-species epidemic model with spatial dynamics, *Math. Biosciences* 206, 46-60.
- I-J Kim, DD Olesky, BL Shader, P van den Driessche, 2007. Sign patterns that allow a positive or nonnegative left inverse, *SIAM J. Matrix Anal. Appl.*, 29, 554-565.
- I-J Kim, JJ McDonald, DD Olesky, P van den Driessche, 2007. Inertias of zero-nonzero patterns, *Lin. & Mult. Alg.*, 55, 229-238.

- J Arino, F Brauer, P van den Driessche, J Watmough, J Wu, 2007. A final size relation for epidemic models, *Math. Biosci. Eng.*, 4, 159-175.
- P Klepac, M Neubert, P van den Driessche, 2007. Dispersal delays and the paradox of enrichment, *Theor. Pop. Biol.*, 71, 436-444.
- I-J Kim, DD Olesky, P van den Driessche, 2007. Inertially arbitrary sign patterns with no nilpotent realization, *Lin. Alg. Appl.*, 421, 264-283.
- MJ Wonham, MA Lewis, J Renclawowicz, P van den Driessche, 2006. Transmission assumptions generate conflicting predictions in host-vector disease models: a case study in West Nile virus, *Ecology Letters*, 9, 706-725.
- MA Lewis, J Renclawowicz, P van den Driessche, M Wonham, 2006. A comparison of continuous and discrete-time West Nile virus models, *Bull. Math. Biol.*, 68, 491-509.
- M Lewis, J Renclawowicz, P van den Driessche, 2006. Travelling waves and spread rates for a West Nile virus model. *Bull. Math. Biol.*, 68, 3-23.
- J Arino, F Brauer, P van den Driessche, J Watmough, J Wu, 2006. Simple models for containment of an epidemic. *J. R. Soc. Interface*, 3, 453-457.
- LJS Allen, P van den Driessche, 2006, Stochastic epidemic models with a backward bifurcation. *Math. Biosci. Eng.*, 3, 445-458.
- DD Olesky, B Shader, P van den Driessche, 2005. Permanents of Hessenberg (0,1)-matrices. *Elec. J. Combinatorics*, 12, R70, 25pp.
- LF Dame, DD Olesky, P van den Driessche, 2005, The exponent and circumdiameter of primitive digraphs, *Lin. Alg. Appl.*, 396, 243-258.
- T Britz, DD Olesky, P van den Driessche, 2005. Schur complements of matrices with acyclic bipartite graphs, *Elec. J. Lin. Alg.*, 14, 2-11.
- CC McCluskey, E Roth, P van den Driessche, 2005. Implications of Aerial sexual mixing on gonorrhoea, *Amer. J. Human Biology*, 17, 293-300.
- C Bowman, AB Gumel, P van den Driessche, J Wu, H Zhu, 2005. A mathematical model for assessing control strategies against West Nile virus, *Bull. Math. Biol.*, 67, 1107-1133.
- J Arino, JR Davis, D Hartley, R Jordan, JM Miller, P van den Driessche, 2005. A multi-species epidemic model, *Math. Medicine and Biology*, 22, 129-142.
- G MacGillivray, R Tiefenbach, P van den Driessche, 2005. Spectrally arbitrary star sign patterns, *Lin. Alg. Appl.*, 400, 91-119.
- R Satnoianu, P van den Driessche, 2005. Some remarks on matrix stability with application to Turing instability, *Lin. Alg. Appl.*, 398, 69-74.

Book Edited

F Brauer, P van den Driesche, J Wu, 2008. Mathematical Epidemiology, Lecture Notes in Math, Vol. 1945, Springer. (I authored 2 chapters and co-authored another chapter).