

TEXAS STATE VITA**I. Academic/Professional Background**

A. Name: Dr. Julio G. Dix

Title: Professor

B. Educational Background

<i>Degree</i>	<i>Year</i>	<i>University</i>	<i>Major</i>	<i>Thesis/Dissertation</i>
PHD	1984	Univ of Cincinnati Main Campus	Mathematics, General	
MS	1982	Univ of Cincinnati Main Campus	Mathematics, General	
BA	1980	Universidad de Bogota	Mathematics, General	

C. University Experience

<i>Position</i>	<i>University</i>	<i>Dates</i>
Professor	Texas State University	1995 - Present
Associate Prof	Texas State University	1990 - 1995
Assistant Prof	Texas State University	1987 - 1990
Assistant Prof	Univ. of Puerto Rico	1984 - 1987

II. TEACHING

B. Courses Taught:

Texas State University:

MATH 1311 - BASIC MATH

MATH 1315 - COLL ALGEBRA

MATH 1319 - MATH BA+ECO I

MATH 1319 - MATH BUS & ECO I

MATH 1329 - MATH BUS & ECO II

MATH 2321 - CALC LIFE SCI I

MATH 2331 - CALC LIFE SCI II

MATH 2331 - MATH LIF SCI 2

MATH 2358 - DISCRETE MATH I

MATH 2417 - PRE-CALCULUS
MATH 2417 - PRE-CALCULUS MATH
MATH 2471 - CALCULUS I
MATH 2472 - CALCULUS II
MATH 3323 - DIFFEREN EQUAT
MATH 3330 - INTRO ADV MATHEMAT
MATH 3330 - INTRO TOPOLOGY
MATH 3373 - CALCULUS III
MATH 3375 - ENGR MECHANICS
MATH 3377 - LINEAR ALGEBRA
MATH 3380 - ADV CALCULUS I
MATH 3380 - ANALYSIS I
MATH 4315 - ADV CALCULUS II
MATH 4336 - TOPICS APP MATH
MATH 5301 - PART DIFF EQUAT
MATH 5301 - PARTIAL DIFFER EQUATI
MATH 5317 - PROB ADV MATH
MATH 5336 - TOPIC APPL MATH
MATH 5373 - FUNCT REAL VBLE
MATH 5382 - REAL ANALYSIS
MATH 5399A - THESIS
MATH 5399B - THESIS
MATH 7303 - ANALYSIS
MATH 7313 - ANALYSIS II

C. Directed Student Learning (i.e. theses, dissertations, exit committees, etc.):

Supervisor / Chair, Master's Thesis, "Numerical analysis of a partial differential equation". (1992).

Student(s): Pamela Smith, Graduate.

III. SCHOLARLY/CREATIVE

A. Works in Print (including works accepted, forthcoming, in press):

2. Articles:

a. Refereed Journal Articles:

Dix, J. P., Dix, J. G. (2016). Oscillation of solutions to nonlinear first-order delay differential equations. *Involve*, 9, 465–482.

Dix, J. G., Spanikova, E., Samajova, H. (2015). Asymptotic properties of solutions to a nonlinear system of neutral differential equations. *Differential Equations & Applications*, 7(1), 1—13. doi: 10.7153/dea-07-01

Padhi, S., Dix, J. G., Pati, S. (2014). Global attractivity of solutions of first-order delay differential equations with applications population dynamics. *Dynamic systems and applications*, 23(2-3), 375--390.

Ding, H.-s., Dix, J. G. (2014). Multiple Periodic Solutions for Discrete Nicholson's Blowflies Type System. *Abstract and Applied Analysis*, 2014. doi: 10.1155/2014/659152

Dix, j. G. (2014). Oscillation of solutions to a neutral differential equation involving an n-order operator with variable coefficients and a forcing term. *Differ. Equ. Dynamic Systems*, 22(1), 15-31.

Dix, j. G., Samajova, H., Spanikova, E. (2013). Decay of non-oscillatory solutions for a system of neutral differential equations. *Electron. J. Diff. Equ*, 2013(271), 1-11.

Dix, J. G. (2013). Existence of non-oscillatory solutions for nonlinear differential equations with distributed delays and m-order linear operators with variable coefficients. *J. Nonl. Evol. Equ. Appl*, 2012(9), 113-128.

Dix, J. G., Karpuz, B., Rath, R. N. (2011). Necessary and sufficient conditions for the oscillation of higher-order differential equations involving distributed delays. *E. J. Qualitative Theory of Diff. Equ*, 19, 1-15.

Dix, J. G., Padhi, S. (2010). Existence of multiple positive periodic solutions for delay differential equation whose order is a multiple of 4. *Applied Mathematics and Computation*, 216.

- Dix, J. G. (2010). Oscillation of solutions to a higher-order neutral PDE with distributed deviating arguments. *Electron. J. Qual. Theory Differ. Equ.*, 2010, 1-14.
- Dix, J. G., Padhi, S., Pati, S. (2010). Multiple positive periodic solutions for a nonlinear first order functional difference equation. *Journal of Difference Equations and Applications*, 16(9).
- Dix, J. G., Karakostas, G. L. (2009). A fixed-point theorem for S-type operators on Banach spaces and its applications to boundary-value problems. *Nonlinear Analysis T.M.A.*, 17, 3872-3880.
- Padhi, S., Srivastava, S., Dix, j. G. (2009). Existence of three nonnegative periodic solutions for functional differential equations and applications to hematopoiesis. *PanAmerican Mathematical Journal*, 19(1), 27--36.
- Dix, j. G., Ghose, D. K., Rath, R. (2009). Oscillation of a higher order neutral differential equation with a sub-linear delay term and positive and negative coefficients. *Mathematica Bohoemica*, 134(4), 411-425.
- Dix, J. G., Padhi, S. (2008). Oscillation of functional differential equations of n-th order with distributed deviating arguments. *Journal of Contemporary Mathematics*, 1, 11-24.
- Dix, J. G., Misra, N., Padhy, L., Rath, R. (2008). Oscillatory and asymptotic behaviour of a neutral differential equation with oscillating coefficients. *Theory of Differential Equations*, 2008(19), 1-10.
- Dix, J. G., Terrero-Escalante, C. A. (2008). Stability of solutions to damped equations with negative stiffness. *International Journal of Pure and Applied Mathematics*, 48(3), 301-314.
- Dix, J. G., Rath, R. N., Barik, B. L. S., Dihudi, B. (2007). Necessary Conditions for the Solutions of Second Order Non-linear Neutral Delay Difference Equations to Be Oscillatory or Tend to Zero. *International Journal of Mathematics and Mathematical Sciences*, 2007.
- Dix, J. G., Philos, C. G., Purnaras, I. K. (2006). Asymptotic properties of solutions to linear non-autonomous neutral differential equations. *Journal of Mathematical Analysis and Applications*, 318(1), 296-304.
- Dix, J. G., Philos, C. G., Purnaras, I. K. (2005). An asymptotic property of solutions to linear nonautonomous delay differential equations. *Electron. J. Diff. Equations*, 2005(10), 1-9.
- Dix, J. G. (2005). Asymptotic behavior of solutions to a first-order differential equation with variable delays. *Computers and Mathematics with Applications*, 50, 1791-1800.

- Dix, J. G., Lippmann, D., Gyula Palyi, G., Zucchi, C., Caglioti, L. (2004). Possible mechanism for large enantiomeric excess. *Elsevier*, 173, 179.
- Dix, j. G., Lippmann, D., Palyi, G., Zucchi, C. (1999). Possible mechanism for spontaneous production of enantiomeric Excess. *Advances in Biochirality*, 85-98.
- Dix, J. G. (1998). Decay of solutions of a degenerate hyperbolic equation. *Electron. J. Differential Equations*, 1998, 1-10.
- Bourgeois, E., Cohen, P., Dix, j. G., Natesan, C. (1998). Faculty-determined allocation formula at Southwest Texas State University. *Collection Management*, 23(1-2), 113--123.
- Dix, J. G. (1998). Infinite frequency solutions to discontinuous control systems with variable delay. *Israel J. of Math*, 106(165--176).
- Dix, J. G. (1995). Behavior of solutions to an integral equation in one dimensional packing problems. *Mathematica Japonica*, 42(1), 113--120.
- Dix, J. G., Ogden, R. D. (1994). An interpolation scheme with radial basis in Sobolev spaces $H^s(\mathbb{R}^n)$. *Rocky Mountain Journal of Math*, 24, 1319--1337.
- Dix, J. G., Torrejon, R. (1993). Local solution for a degenerate hyperbolic equation with memory. *Journal of Nonlinear Analysis, Theory Methods and Applications*, 23(2), 225--237.
- Dix, J. G. (1990). A parameter choice for simplified regularization. *Rostocker Math. Kolloquium Schriftleitung*, 42, 59--68.
- Dix, J. G., McCabe, T. (1990). On finding equilibria for isotropic hyperelastic materials. *Journal of Nonlinear Analysis, Theory Methods and Applications*, 15(5), 437--444.
- Dix, J. G. (1988). An optimal parameter choice for regularized ill-posed problems. *Journal of Integral Equations and Operator Theory*, 11, 610-613.
- Dix, J. G., Ogden, R. D. (1988). On condition numbers and convergence of the alternating projections method. *Houston Journal of Mathematics*, 14(2), 209--217.
- Dix, J. G. (1988). On optimal convergence for regularized Tikhonov approximations. *Journal of Optimization Theory and Applications*, 58, 127-131.
- Dix, J. G. (1988). On simplified regularization. *Journal of Optimization Theory and Applications*, 58, 133-138.

Groetsch, C. W., Dix, J. G. (1987). Arcangeli's method for Fredholm equations of the first kind. *Proceedings of the American Mathematical Society*, 99, 256-261.

Dix, J. G. (1986). Finite dimensional simplified regularization. *Rostocker Mathematisches Koloquium Schriftleitung*, 30, 113-120.

Groetsch, C. W., Dix, J. G. (1985). Regularized Ritz approximations for Fredholm equations of the first kind. *Rocky Mountain Journal of Mathematics*, 15, 33--37.

Dix, J. G. (1985). Weak approximation of minimal norm solutions of first kind equations by Tikhonov's method. *Revista Colombiana de Matematicas*, 19, 263-276.

b. Non-refereed Articles:

Dix, J. G. (2004). Some aspects of running a free electronic journal. *The Electronic Library of Mathematics: New Developments in Electronic Publishing*.

Dix, J. G., Castro, A. (2002). Ten Years of the Electronic Journal of Differential Equations. *J. Math. Phys. Sci*, 1(1), 5-7.

10. Other Works in Print:

Ph. D. Thesiss:

Dix, J. G. (1984). *Aspects of the Theory of Tikhonov's Method for the Numerical Solution of Integral Equations*. University of Cincinnati.

5. Other Works not in Print:

a. Works "submitted" or "under review":

Journal Articles:

Pinelas, S., Dix, J. G. Oscillation of solutions to non-linear first-order difference equations with several advanced arguments.

Chatzarakis, G. E., Dix, J. G. Oscillation of nonlinear difference equations with deviating arguments.

C. Scholarly / Creative Grants and Contracts:

IV. SERVICE

A. Institutional

1. University:

Campus Information Resource Advisory Council. (2013 - Present).

Chair, Library Subcommittee. (1997 - Present).

Member, M&O allocation formula. (2007 - 2008).

3. Department/School:

Member, Math-Engineering Liason. (2012 - Present).

Library Representative. (1990 - Present).

Member, Marrit/Performance committee. (2013 - 2015).

Ph.D. Committee, Math Department. (2006).

B. Professional:

Editor, Electron. Journal of Diff. Equations. (1993 - Present).

Coordinator / Organizer, Texas Partial Diff. Eqns. Seminar. (2016).

Editor, Journal of Contemporary Math. (2007 - 2012).

Coordinator / Organizer, Texas Partial Diff. Eqns. Seminar. (2009).

Editor, Electron. Journal of Math. Phys. Sci. (2002 - 2005).

Coordinator / Organizer, Texas Partial Diff. Eqns. Seminar. (1999).

C. Community:

Volunteer, DeZavala Elementary school: Pre-algebra program. (1997 - 2005).

D. Organization Memberships:

American Mathematical Society.