

CURRICULUM VITAE – HRISTO V. KOJOUHAROV

BUSINESS ADDRESS:

Department of Mathematics
The University of Texas at Arlington
P.O. Box 19408
Arlington, TX 76019-0408, U.S.A.

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EDUCATIONAL HISTORY:

- 1/95-5/98** **Ph.D.** (*Applied Mathematics*), Department of Mathematics, **The University of Wyoming**
Dissertation: *Mathematical Modeling of Fluid Flow, Contaminant Transport and Biofilm Growth in Porous Media*
- 9/89-6/94** **M.S.** (*Mathematics*), Faculty of Mathematics and Informatics, **Sofia University “St. Kliment Ohridski”**, Bulgaria
Thesis: *Algorithms for Constructing Smooth Surfaces Using Box-Splines*
- 9/91-6/94** **M.S.** (*Mathematics/Secondary Education*), Faculty of Mathematics and Informatics, **Sofia University “St. Kliment Ohridski”**, Bulgaria
- 9/91-6/93** **Baccalaureate-level** (*Management Information Systems*), Faculty of Liberal Arts, **Sofia University “St. Kliment Ohridski”**, Bulgaria

EMPLOYMENT HISTORY:

- 9/06-Present** **Associate Professor**, *Department of Mathematics*, The University of Texas at Arlington
- 9/00-8/06** **Assistant Professor**, *Department of Mathematics*, The University of Texas at Arlington
- 9/01-8/02** **Visiting Assistant Professor**, *Department of Biology*, The University of Texas at Arlington
- 9/98-5/00** **Visiting Assistant Professor**, *Department of Mathematics*, Arizona State University

HONORS AND AWARDS:

- 2008** **Travel/Professional Development Award**, Office of the Provost and Vice President for Academic Affairs, *The University of Texas at Arlington*
- 2007** **Research Excellence Award**, Office of the Provost and Vice President for Academic Affairs, *The University of Texas at Arlington*
- 2007** **Who's Who of Emerging Leaders**, The 1-st Edition of *Marquis Who's Who of Emerging Leaders*
- 2006** **Research Excellence Award**, Office of the Provost and Vice President for Academic Affairs, *The University of Texas at Arlington*
- 2006** **Travel/Professional Development Award**, Office of the Provost and Vice President for Academic Affairs, *The University of Texas at Arlington*
- 2006** **Who's Who in Science and Engineering**, The 9-th Edition of *Marquis Who's Who in Science and Engineering*
- 2006** **Who's Who in American Education**, The 7-th Edition of *Marquis Who's Who in American Education*
- 2006** **Who's Who in America**, The 60-th Diamond Anniversary Edition of *Marquis Who's Who in America*
- 2005** **Faculty Travel Supplement Program Award**, Office of the Dean of the Graduate School, *The University of Texas at Arlington*
- 2005** **Professor of the Year**, Mathematical Association of America, UTA Student Chapter, *The University of Texas at Arlington*
- 2005** **Research Excellence Award**, Office of the Provost and Vice President for Academic Affairs, *The University of Texas at Arlington*
- 2005** **Travel/Professional Development Award**, Office of the Provost and Vice President for Academic Affairs, *The University of Texas at Arlington*
- 2005** **Who's Who in America**, The 59-th Edition of *Marquis Who's Who in America*
- 2004** **Who's Who in America**, The 58-th Edition of *Marquis Who's Who in America*
- 2004** **Who's Who in Sciences Higher Education**, *Academic Keys, LLC*.
- 2000** **Outstanding Dissertation Award** (nominated), Awards Subcommittee of the Graduate Council, *The University of Wyoming*
- 1998** **Who's Who Among Students**, The 64-th Edition of *Marquis Who's Who Among Students in American Universities & Colleges*
- 1998** **Honorary Award Recognition**, The 21-st Annual Edition of *The National Dean's List*, The University of Wyoming
- 8/97-5/98** **Graduate Teaching Fellowship**, Department of Mathematics, *The University of Wyoming*
- 1/95-5/97** **Graduate Research Fellowship**, Grant from the *United States Geological Survey* through the *Wyoming Water Resources Center*, The University of Wyoming
- 9/89-6/94** **Graduate Fellowship for Excellent Academic Performance**, Department of Mathematics and Computer Sciences, *Sofia University "St. Kliment Ohridski"*, Bulgaria

RESEARCH, EDUCATION, AND TRAVEL GRANTS:

AWARDED RESEARCH AND EDUCATION GRANTS:

- 9/08-8/13** “UBM-Institutional: Undergraduate Training in Theoretical Ecology Research (UTTER)” (PI; J. Grover, D.L. Hawkins, C. Kribs Zaleta, L. Mydlarz, Co-PIs; L. Gough, FA), **US-NSF**, *Ref: DUE-0827136*, Total Amt.: \$780,946.00
- 6/08-5/12** “Scholarships for Undergraduates to Reach Goals in Education (SURGE)” (Co-PI; J. Zhu, PI; T. Aktosun, R. Gornet, B. Shipman, Co-PIs), **US-NSF**, *Ref: DUE-0807110*, Total Amt.: \$483,000.00
- 9/01-8/02** “Interdisciplinary Grants in the Mathematical Sciences: Modeling Microbial Populations, Biofilms and Competition Dynamics in a General Gradostat” (PI; J. Grover, N. Smatresk, Co-PIs), **US-NSF**, *Ref: DMS-0107439*, Total Amt.: \$99,998.00
- 9/01-8/02** “Mathematical and Computational Methods for Modeling of Subsurface Biobarrier Persistence in the Presence of Protozoa” (PI), **UTA**, *Ref: REP-14748717*, Total Amt.: \$8,200.00

AWARDED TRAVEL GRANTS:

- 12/2006** 2007 AMS-MAA Joint Mathematics Meeting: “Diversity Initiative Grant”, *The Mathematical Association of America – Committee on Student Activities and Chapters*, Total Amt.: \$500.
- 8/2000** AMS Conference: “Mathematical Challenges of the 21-st Century”, *American Mathematical Society – National Science Foundation*, Total Amt.: \$1,000.
- 1/2000** IMA Workshop: “Confinement and Remediation of Environmental Hazards”, *Institute for Mathematics and its Applications – National Science Foundation*, Total Amt.: \$1,500.
- 1/1995** “Grant-in-Aid for Foreign Studies”, *National Science Foundation “Eureka”, Bulgaria*

PUBLICATIONS:

REFEREED JOURNALS/SERIES:

- [r27] Chen-Charpentier, B.M., D.T. Dimitrov, H.V. Kojouharov “Numerical simulation of multi-species biofilms in porous media for different kinetics”, *Math. Comput. Simulation*, in press (2008).
- [r26] Chen-Charpentier, B.M. and H.V. Kojouharov, “Mathematical modeling of bioremediation of trichloroethylene in aquifers”, *Comput. Math. Appl.*, 56:3 (2008) 645-656.
- *[r25] Dimitrov, D.T. and H.V. Kojouharov, “Nonstandard finite-difference methods for predator-prey models with general functional response”, *Math. Comput. Simulation*, 78:1 (2008) 1-11.
- *[r24] Dimitrov, D.T. and H.V. Kojouharov, “Stability-Preserving Finite-Difference Methods for General Multi-Dimensional Autonomous Dynamical Systems”, *Int. J. Numer. Anal. Model.*, 4:2 (2007) 282-292.
- *[r23] Dimitrov, D.T. and H.V. Kojouharov, “Nonstandard Numerical Methods for a Class of Predator-Prey Models with Predator Interference”, *Electron. J. Differential Equations*, 15 (2007) 67-75.
- *[r22] Chen-Charpentier, B.M., D.T. Dimitrov, H.V. Kojouharov “Combined Nonstandard Numerical Methods for ODEs with Polynomial Right-Hand Sides”, *Math. Comput. Simulation*, 73:1-4 (2006) 105-113.
- *[r21] Dimitrov, D.T. and H.V. Kojouharov, “Positive and Elementary Stable Nonstandard Numerical Methods with Applications to Predator-Prey Systems”, *J. Comput. Appl. Math.*, 189:1-2 (2006) 98-108.
- *[r20] Dimitrov, D.T. and H.V. Kojouharov, “Analysis and Numerical Simulation of Phytoplankton-Nutrient Systems with Nutrient Loss”, *Math. Comput. Simulation*, 70:1 (2005) 33-43.
- *[r19] Dimitrov, D.T. and H.V. Kojouharov, “Nonstandard Finite-Difference Schemes for General Two-Dimensional Autonomous Dynamical Systems”, *Appl. Math. Lett.*, 18:7 (2005), 769-774.
- *[r18] Dimitrov, D.T. and H.V. Kojouharov, “Complete mathematical analysis of predator-prey models with linear prey growth and Beddington-DeAngelis functional response”, *Appl. Math. Comput.*, 162:2 (2005), 523-538.
- [r17] Kojouharov, H.V. and B.M. Chen, “Nonstandard Eulerian-Lagrangian Methods for Multi-Dimensional Reactive Transport Problems”, *Appl. Numer. Math.*, 49:2 (2004), 225-243.
- [r16] Kojouharov, H.V. and B.D. Welfert, “Generalized Nonstandard Numerical Methods for Nonlinear Advection-Diffusion-Reaction Equations”, *Large-Scale Scientific Computing*, pp. 465-472, *Lecture Notes in Comput. Sci.*, 2907, Springer-Verlag, Berlin, 2004.
- [r15] Chen-Charpentier, B.M. and H.V. Kojouharov, “Numerical simulation of dual-species biofilms in porous media”, *Appl. Numer. Math.*, 47:3-4 (2003), 377-389.
- [r14] Jones, D., H.V. Kojouharov, D. Le, H. Smith, “The Freter model: A simple model of biofilms formation”, *J. Math. Biol.*, 47:2 (2003) 137-152.

* Publications resulting from supervised theses and dissertations

PUBLICATIONS (continue):

REFEREED JOURNALS/SERIES (CONTINUE):

- [r13] Kojouharov, H.V. and B.D. Welfert, “A Nonstandard Euler Scheme for $y'' + g(y)y' + f(y)y = 0$ ”, *J. Comput. Appl. Math.*, 151:2 (2003) 335-353.
- [r12] Jones, D., H.V. Kojouharov, D. Le, H. Smith, “Microbial Competition for Nutrient in a Flow Reactor”, *Dyn. Contin. Discrete Impuls. Syst. Ser. B: Appl. Algorithms*, 10:1 (2003) 57-68.
- [r11] Jones, D., H.V. Kojouharov, D. Le, H. Smith, “Bacterial Wall Attachment in a Flow Reactor”, *SIAM J. Appl. Math.*, 62:5 (2002) 1728-1771.
- [r10] B.M. Chen-Charpentier and H.V. Kojouharov, “Simulation of Biobarrier-Protozoa Interaction in Porous Media”, Fluid Flow and Transport in Porous Media: Mathematical and Numerical Treatment, pp. 105-113, *Contemporary Mathematics 295*, Amer. Math. Soc., Providence, RI, 2002.
- [r9] Jones, D., H.V. Kojouharov, D. Le, H. Smith, “Bacterial Wall Attachment in a Flow Reactor: Mixed Culture”, *Canad. Appl. Math. Quart.*, 10:1 (2002) 111-138.
- [r8] B.M. Chen-Charpentier and H.V. Kojouharov, “Numerical Simulation of Biofilm-Forming Bacteria and Other Microbes in Porous Media”, Computational Methods in Water Resources, pp. 819-827, *Developments in Water Science 47*, Elsevier Science B.V., Amsterdam, The Netherlands, 2002.
- [r7] Kojouharov, H.V. and B.D. Welfert, “A New Numerical Approach for the Solution of Scalar Nonlinear Advection-Reaction Equations”, *Internat. J. Appl. Sci. Comput.*, 8:2 (2001) 119-126.
- [r6] Chen, B.M. and H.V. Kojouharov, “Modeling of Subsurface Biobarrier Formation”, *J. Hazardous Substance Research*, 3:1 (2001) 1-13.
- [r5] B. Chen and H. Kojouharov, “Metodos No Estandar Para Ecuaciones Diferenciales”, (review article) *Terceras Jornadas de Investigación y Fomento de la Multidisciplinariedad*, pp. 17-27 (C. Coll et. al., Eds), Editorial U.P.V., Valencia, Spain, 2001.
- [r4] Kojouharov, H.V. and B.M. Chen, “Non-Standard Methods for the Convective-Dispersive Transport Equation with Nonlinear Reactions”, *Numer. Methods Partial Differential Equations*, 15:6 (1999) 617-624.
- [r3] Chen, B.M. and H.V. Kojouharov, “Non-Standard Numerical Methods Applied to Subsurface Biobarrier Formation Models in Porous Media”, *Bull. Math. Biology*, 61:4 (1999) 779-798.
- [r2] Kojouharov, H.V. and B.M. Chen, “Non-Standard Methods for the Convective Transport Equation with Nonlinear Reactions”, *Numer. Methods Partial Differential Equations*, 14:4 (1998) 467-485.
- [r1] Liu, B., M.B. Allen, H. Kojouharov and B. Chen, “Finite-Element Solution of Reaction-Diffusion Equations with Advection”, *Computational Methods in Water Resources, XI, Vol. 1*, pp. 3-12, Comput. Mech., WIT Press, Southampton, UK, 1996.

* Publications resulting from supervised theses and dissertations

PUBLICATIONS (continue):

CHAPTERS IN BOOKS:

- [cb3] Chen, B.M. and H.V. Kojouharov, “Biofilms in Porous Media: Mathematical Modeling and Numerical Simulation”, *Environmental Bioremediation Technologies*, (Singh, S.N.; Tripathi, R.D.; Eds.), pp. 481-511, Springer-Verlag Berlin Heidelberg New York, 2007.
- *[cb2] Dimitrov, D.T., H.V. Kojouharov, B.M. Chen, “Reliable Finite Difference Schemes with Applications in Mathematical Ecology”, *Advances in the Application of the Nonstandard Finite Difference Schemes*, (R.E. Mickens, Ed.), pp. 249-286, World Sci. Publishing, River Edge, NJ, 2005.
- [cb1] Kojouharov, H.V. and B.M. Chen, “Non-Standard Eulerian-Lagrangian Methods for Advection-Diffusion-Reaction Equations”, *Applications of the Nonstandard Finite Difference Schemes*, (R.E. Mickens, Ed.), pp. 55-108, World Sci. Publishing, River Edge, NJ, 2000.

NON-REFEREED CONFERENCE PROCEEDINGS:

- [nr6] Chen, B.M. and Kojouharov, H.V. and D.T. Dimitrov, “Qualitatively Stable Nonstandard Finite Difference Methods”, *Finite Difference Methods: Theory and Applications*, 20-28 (I. Farago, P. Vabishchevich, L. Vulkov, Eds.), Rouse University Angel Kanchev, Rouse, Bulgaria, 2007.
- [nr5] Dimitrov, D.T. and H.V. Kojouharov, “Nonstandard Finite Difference Methods for Predator-Prey Systems with Ratio-Dependent Functional Response”, *Finite Difference Methods: Theory and Applications*, 161-166 (I. Farago, P. Vabishchevich, L. Vulkov, Eds.), Rouse University Angel Kanchev, Rouse, Bulgaria, 2007.
- [nr4] Chen, B.M. and H.V. Kojouharov, “Modeling of Subsurface Biobarrier Formation”, *Proceedings of the 14-th Annual Conference on Hazardous Waste Research*, 228-237 (Larry E. Erickson, Ed.), GP/RM HSRC, KS, 2001.
- [nr3] Kojouharov, H.V. and B.D. Welfert, “A New Numerical Approach for the Solution of Non-linear Advection-Reaction Equations”, *Proceedings of the International Conference on Scientific Computing and Mathematical Modeling*, pp. 124-127 (D. Schultz et al., Eds.), IASC, WI 2000.
- [nr2] Chen, B.M. and H.V. Kojouharov, “Accurate Numerical Simulation of Biobarrier Formation in Porous Media”, *Proceedings of the 13-th Annual Conference on Hazardous Waste Research*, 224-240 (L.E. Erickson and M. Rakin, Eds.), GP/RM HSRC, KS, 1999.
- [nr1] Kojouharov, H.V., “Non-Standard Methods for Reaction-Dispersion Equations with Convection”, *Proceedings of the Seventeenth Annual American Geophysical Union Hydrology Days*, 183-191 (H.J. Morel-Seytoux, Ed.), Hydrology Days Publications, CA, 1997.

* Publications resulting from supervised theses and dissertations

PRESENTATIONS:

CONFERENCE PRESENTATIONS:

- “Compatible Discretizations for Continuous Dynamical Systems: Theory and Applications” (Plenary Speaker), *AMEE’08: Thirty-fourth International Conference on “Applications of Mathematics in Engineering and Economics”*, Sozopol, Bulgaria, 6/2008.
- “Nonstandard Finite Difference Methods: Theory and Applications” (Keynote Speaker), *AMEE’07: Thirty-third International Conference on “Applications of Mathematics in Engineering and Economics”*, Sozopol, Bulgaria, 6/2007.
- “Qualitatively Stable Nonstandard Finite Difference Methods”, *LSSC’07: VI International Conference on “Large-Scale Scientific Computations”*, Sozopol, Bulgaria, 6/2007.
- “Positive and Elementary Stable Nonstandard Finite Difference Methods”, *International Conference “Pioneers of Bulgarian Mathematics”*, Sofia University “St. Kliment Ohridski”, Bulgaria, 7/2006.
- “Modeling and Simulation of Biofilms”, *Research Day ’05*, University of Texas at Arlington, Texas, 11/2005.
- “Numerical Methods for Differential Equations”, 4 lectures with computer labs, *MTBI 2005: Mathematical and Theoretical Biology Institute*, Los Alamos National Laboratory, New Mexico, 6/2005.
- “Nonstandard Finite Difference Methods with Applications to Single- and Multi-Species Population Models”, *ICCAM 2004: Eleventh International Congress on Computational and Applied Mathematics*, Katholieke Universiteit Leuven, Belgium, 7/2004.
- “Generalized Nonstandard Numerical Methods for Nonlinear Advection-Diffusion-Reaction Equations”, *IV International Conference on “Large-Scale Scientific Computations”*, Sozopol, Bulgaria, 6/2003.
- “Numerical Simulation of Biofilm-Forming Bacteria and Other Microbes in Porous Media”, *XIV International Conference on Computational Methods in Water Resources*, Delft, The Netherlands, 6/2002.
- “Biocomplexity-Incubation Activity: Developing conceptual and mathematical approaches to model transport and transformation of elements through a geothermal landscape”, *NSF Biocomplexity Project Meeting*, Yellowstone National Park, Wyoming, 9/2001.
- “Generalized Nonstandard Methods for Advection-Diffusion Equations with Nonlinear Reactions”, Special Session 13: Numerical Methods on Differential Equations, *V Joint Meeting AMS-SMM*, Morelia, Michioacan, Mexico, 5/2001.
- “A New Numerical Approach for the Solution of Nonlinear Advection-Reaction Equations”, *IMACS 2000: International Conference on Scientific Computing and Mathematical Modeling*, University of Wisconsin - Milwaukee, Wisconsin, 5/2000.
- “Nonstandard Eulerian-Lagrangian Methods for Convection-Diffusion-Reaction Equations”, *1999 SIAM Annual Meeting*, Atlanta, Georgia, 5/1999.
- “Nonstandard Eulerian-Lagrangian Methods for Reactive Transport Problems”, *Fifth SIAM Conference on Mathematical and Computational Issues in the Geosciences*, San Antonio, Texas, 3/1999.
- “Microbial Transport and Biotransformation Processes in Porous Media”, *Complex Biological Systems Meeting*, SSERC and Department of Mathematics, Arizona State University, Arizona, 10/1998.
- “Accurate Numerical Simulation of Biobarrier Formation in Porous Media”, *1998 Conference on Hazardous Waste Research*, Snowbird Ski and Summer Resort, Utah, 5/1998.
- “Non-Standard Methods for Reaction-Dispersion Equations with Convection”, *AGU Seventeenth Annual ‘Hydrology Days’ Conference*, Colorado State University, Colorado, 4/1997.

PRESENTATIONS (continue):

INVITED SEMINARS:

- “Qualitatively stable nonstandard finite difference methods for dynamical systems in ecology”, *Colloquium Series*, Texas A&M University-Commerce, 11/2006.
- “Nonstandard Finite Difference Methods: Theory and Applications”, *Research Colloquium Series*, SMU, 11/2005.
- “Modeling and Simulation of Single- and Dual-Species Biofilms”, *Institute for Scientific Computation Seminar Series*, Texas A&M University, 6/2004.
- “Mathematical Modeling of Biofilm-Forming Microbes in Porous Media”, *Pi Mu Epsilon - Texas Iota Chapter Undergraduate Seminar Series*, The University of Texas at Arlington, 11/2003.
- “Mathematical Modeling and Numerical Simulation of Microbial Populations”, *Converging Biotechnology Center Seminar*, The University of Texas at Arlington, 11/2003.
- “Nonstandard Finite Difference Methods: Theory and Applications”, *Numerical Analysis Seminar*, Texas A&M University, 10/2003.
- “Nonstandard Finite Difference Methods for Partial Differential Equations”, *Applied Mathematics Seminar*, The University of Texas at Arlington, 10/2003.
- “Reactive groundwater transport model with porosity variations”, *Mathematical Biology Seminar*, Arizona State University, 12/2001.
- “Accurate Numerical Methods for Simulating Reactive Transport in Porous Media”, *Applied Mathematics Colloquium Series*, Department of Mathematics, Monmouth University, 4/2000.
- “Mathematical Modeling of Biofilm Growth and Contaminant Transport in Porous Media”, *Mathematics Colloquium Series*, Department of Mathematics and Statistics, Rochester Institute of Technology, 3/2000.
- “Mathematical Modeling of Biofilm Growth and Contaminant Transport in Porous Media”, *Applied Mathematics Seminar*, Department of Mathematics, California State University at San Bernardino, 3/2000.
- “Non-Standard Numerical Solutions of Advection-Diffusion-Reaction Equations”, *Applied Mathematics Seminar*, Department of Mathematics, The University of Texas at Arlington, 2/2000.
- “Non-Standard Numerical Solution of Advection-Diffusion-Reaction Equations”, *Fall 1999 Seminars in Applied Mathematics and Statistics*, Department of Mathematics and CAMS, New Jersey Institute of Technology, 11/1999.
- “Non-Standard Methods for Solving the Convection-Dispersion-Reaction Equation”, *Analysis and Applied Mathematics Seminar*, Department of Mathematics, The University of Wyoming, 4/1997.
- “Biofilm Accumulation and Activity in Porous Media: Part II. A Modified Method of Characteristics Incorporating Streamline Diffusion for Solving Nutrients and Microbes Transport Equations”, *Applied Mathematics Seminar*, Department of Mathematics, The University of Wyoming, 3/1996.
- “Biofilm Accumulation and Activity in Porous Media: Part I. Mixed Finite-Element Solution of the Water Flow Equation”, *Applied Mathematics Seminar*, Department of Mathematics, The University of Wyoming, 3/1996.

TEACHING ACTIVITIES:

9/00-Present The University of Texas at Arlington, Department of Mathematics

- MATH 5373: *Numerical Solution of ODEs* (4 semesters)
- MATH 5300: *Computer Programming and Applications I* (6 semesters)
- MATH 3345: *Numerical Analysis and Computer Applications I* (8 semesters)
- MATH 3319: *Differential Equations and Linear Algebra* (8 semesters)
- MATH 2325: *Calculus II* (2 semesters)
- MATH 1323: *Pre-Calculus II* (3 semester)
- MATH 1303: *Trigonometry* (3 semesters)
- MATH 4191: *Introduction to MATLAB* (1 semester)
- MATH 4391: *Research in Mathematical Biology* (1 semester)
- MATH 5391: *Mathematical Biology* (3 semesters)
- MATH 5395: *Special Project*
- MSCI 6399/6699/6999: *Dissertation*

9/98-5/00 Arizona State University, Department of Mathematics

- *Calculus I, Calculus II*

9/97-5/98 The University of Wyoming, Department of Mathematics

- *Calculus with Analytic Geometry I, Pre-Calculus Trigonometry, Mathematical Theory of Age-Structured Population Dynamics*

Spring 1994 High School “Darvenitza”, Sofia, Bulgaria

- *College Algebra*

GRADUATE SUPERVISIONS:

PH.D. DISSERTATIONS DIRECTED:

- 4/2008 Ian Marines, **Ph.D.** (*Mathematics*), Department of Mathematics, **The University of Texas at Arlington**
Dissertation: *Mathematical Analysis of Allelopathy and Resource Competition Models*
- 4/2005 Dobromir Dimitrov, **Ph.D.** (*Mathematical Sciences/Mathematics*), Department of Mathematics, **The University of Texas at Arlington**
Dissertation: *Nonstandard Finite-Difference Methods for Dynamical Systems with Applications in Mathematical Biology*
- 4/2004 Hilaire Kadjo, **Ph.D.** (*Mathematical Sciences/Mathematics*), Department of Mathematics, **The University of Texas at Arlington**
Dissertation: *An Age Structured Population Model: Interactions Between Nutrients and Phytoplankton*

M.S. SPECIAL PROJECTS/THESES DIRECTED:

- 11/2005 Nithin Rahul, **M.S.** (*Mathematics/Computer Science track*), Department of Mathematics, **The University of Texas at Arlington**
- 4/2005 Yonael Gebreyohannes, **M.S.** (*Mathematics/Computer Science track*), Department of Mathematics, **The University of Texas at Arlington**
Thesis: *Numerical Simulation of Multi-Lane Traffic Flow*
- 11/2004 Sompoom Meechowana, **M.S.** (*Mathematics/Computer Science track*), Department of Mathematics, **The University of Texas at Arlington**
Thesis: *Numerical Methods for a System of Partial Differential Equations for Traffic Flow*
- 7/2003 Dobromir Dimitrov, **M.S.** (*Mathematics/Computer Science track*), Department of Mathematics, **The University of Texas at Arlington**
Thesis: *Complete mathematical analysis of a predator-prey model with a Beddington-DeAngelis functional response*

GRADUATE STUDENT COMMITTEES:

- Present** J. Blackwell (advisor J. Su), **Ph.D. Student** (Mathematical Sciences/ Mathematics), The University of Texas at Arlington
- Present** M. Ali Akinlar (advisor G. Liao), **Ph.D. Student** (Mathematical Sciences/ Mathematics), The University of Texas at Arlington
- Present** K. Crane (advisor J. Grover), **Ph.D. Student** (Environmental Science and Engineering), The University of Texas at Arlington
- Present** S. Saha (advisor Y. Liu), **Ph.D. Student** (Mathematical Sciences/ Mathematics), The University of Texas at Arlington
- 7/01-8/08 **11 Ph.D. Student Committees** (Mathematical Sciences/ Mathematics/ Chemistry), University of Texas at Arlington
- 7/01-8/08 **15 M.S. Student Committees** (Mathematics/ Statistics/ Mathematics Education), University of Texas at Arlington

COMMUNITY AND UNIVERSITY SERVICE:

COMMUNITY SERVICE:

- 4/01-Present** Founding Chair, Organizing Committee, Annual UTA Calculus Bowls, UT-Arlington
 The UTA Calculus Bowl is a community outreach program through the College of Science at the University of Texas at Arlington. It is an annual event involving outstanding mathematics students from an average of 25 high schools across the North Texas area.
 See <http://www.uta.edu/math/calcbowl/>.
- 2003-Present** Member, Organizing Committee, UTA UIL-Prep Math & Science Tournament
- 4/2003** Judge, 2003 ExxonMobil Texas Science & Engineering Fair
- 4/2002** Judge, 2002 ExxonMobil Texas Science & Engineering Fair

UNIVERSITY SERVICE:

- 6/06-Present** Faculty Advisor, Student Chapter of the Mathematical Association of America at UT Arlington, UT Arlington
- 6/06-5/08** Member, Mathematics Department P&T Committee, UT Arlington
- 10/05-Present** Co-Organizer and Webmaster, 29th Annual Texas Partial Differential Equations Conference, March 25-26, 2006, UT Arlington
- 9/04-8/06** Organizer, Applied Mathematics Seminar Series, UT Arlington
- 9/05-Present** Member, Mathematics Department Colloquium Committee, UT Arlington
- 8/03-5/05** Member, Mathematics Chair Search Committee, UT Arlington
- 6/04-5/08** Member, Mathematics Department Advisory Committee, UT Arlington
- 6/04-5/06** Member, Mathematics Department Undergraduate Affairs Committee, UT Arlington
- 10/02-Present** Mathematics Department Safety Liaison Representative, UT Arlington
- 11/05-Present** Member, Ecology Group, UT Arlington
- 7/03-Present** Member, Bioscience & Bioengineering Center, UT Arlington
- 11/02-Present** Member, Center for Numerical Simulation and Modeling, UT Arlington
- 11/02-Present** Founding Member, MAIDO Institute, UT Arlington
- 3/02-Present** Member, UTA High Performance Computing Group
- 8/04-Present** UTA-Mathematics Web Master/Administrator, UT Arlington
- 1/01-12/02** Member, Mathematics Library Committee, UT Arlington
- 8/00-8/02** UTA-Mathematics Web Master/Administrator, UT Arlington

COMMUNITY AND UNIVERSITY SERVICE (continue):

BOARD OF EDITORS:

4/08-Present Applications and Applied Mathematics: An International Journal (AAM)

REFEREE/REVIEWER WORK:

- Office of International Science & Engineering (OISE), U.S. National Science Foundation
- COBASE Project Development and Initiation Grants, Joint U.S. NSF/NRC Program
- U.S. Civilian Research and Development Foundation, U.S. Department of State
- Office of Research, Memorial University of Newfoundland, Canada
- South Africa's National Research Foundation (NRF), South Africa
- SIAM Journal on Numerical Analysis, Numerical Methods for Partial Differential Equations, Journal of Computational and Applied Mathematics, Applied Numerical Mathematics, Journal of Theoretical Biology, Electronic Journal of Differential Equations, International Journal of Numerical Analysis and Modeling, Ecological Modelling, Discrete and Continuous Dynamical Systems - Series B, Lecture Notes in Computer Science, AIP Proceeding, Journal of Applied Mathematics, AIMS Proceedings, McGraw-Hill, Inc.

VISITORS HOSTED AT UT ARLINGTON:

- 5/2008** R. Anguelov, University of Pretoria, South Africa
- 1/2008-5/2008** M. Todorov, Technical University of Sofia, Bulgaria
- 2/2007** R. E. Mickens, Clark Atlanta University
- 2/2007** N. Metodiev, Texas A&M University - Commerce
- 4/2006** D. Grantcharov, San Jose State University
- 11/2005** N. Cagan, Rice University
- 11/2004** A. Telyakovskiy, University of Nevada at Reno
- 3/2004** Y. Efendiev, Texas A&M University
- 10/2003** B. Ayati, Southern Methodist University
- 5/2003** D. Grantcharov, University of California at Riverside
- 2/2003** B. Popov, Texas A&M University
- 8/2002** B. Chen-Charpentier, University of Wyoming
- 4/2002** Pavlin Entchev, Texas A&M University
- 5/2002** H. Smith, Arizona State University
- 5/2002** D. Jones, Arizona State University
- 11/2001** S. Baer, Arizona State University
- 3/2001** H. Smith, Arizona State University
- 11/2000** B. Welfert, Arizona State University