Norma L. Ortiz
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Education

1. PhD in Mathematics May 2005
   Louisiana State University (LSU), Baton Rouge, LA
   Dissertation Title: Optimization of Dynamical Systems with Time Delay
   Advisor: Peter R. Wolenski
2. Master of Science in Mathematics May 2001
   Louisiana State University
3. Bachelor of Science, Major: Computer Science May 1996
   University of Louisiana (ULL), Lafayette, LA

Professional Experience

1. Assistant Professor, Department of Mathematics and Applied Mathematics
   Virginia Commonwealth University 2005-present

Honors/Awards

1. Travel support. Sept. 6-9, 2007. Control and Optimization conference in Ardeillers, France. *Award:* Invitation and local expenses.
2. Travel support, May 22-31, 2007, Louisiana Workshop on Mathematical Control. *Award:* Invitation and local expenses.
3. Travel support. June 5-9 2006. Nonsmooth Analysis: A Conference in Honor of the 73rd Birthday of H. Hermes and the 71st Birthday of R.T. Rockafellar to be held in Rome, Italy *Award:* Invitation. All travel and local expenses.
4. Travel support, May 16-24 2006, Louisiana Workshop on Mathematical Control. *Award:* Invitation to the workshop and all local expenses covered.
5. Travel support, April 2005, Institute for Mathematics and its Applications (IMA). All expenses were covered to attend the Career Workshop on Minorities and Applied Mathematics and present a poster. *Award:* Plane ticket and all local expenses covered.
6. Travel support, January 2005, Association for Women in Mathematics. Expenses covered to present a poster at the AWM workshop held at the Joint AMS/MAA Mathematical Meetings. Award: $700.
7. Travel support, January 2005, Louisiana State University Graduate School. Travel grant to attend the Joint AMS/MAA Mathematical Meetings. *Award:* $300.
8. Certificate of Teaching Excellence, December 2004. Louisiana State University Mathematics Department.
9. Travel support, December 2002, Prof. Q. Jim Zhu of Western Michigan University. Travel grant to present research at CDC-IEEE workshop. *Award:* $851.70.

10. Graduate School Enhancement Fellowship, 2002-2005. Louisiana State University Graduate School. *Award:* $8000 per school year.
11. Certificate of Teaching Excellence, December 2001. Louisiana State University Mathematics Department.
12. Nomination for Most Accommodating Faculty/Staff by office of disability services, Fall 2001. Louisiana State University
13. Academic Enhancement Training scholarship, 1999-2001. National Science Foundation-Louisiana State University. *Award:* $5500 total.

Research

Publications

1. Learner-centered strategies and advanced mathematics, (with A.J. Ellington), submitted 2007.
2. Monotone and oscillatory solutions of a rational difference equation containing quadratic terms (with M. Dehghan, C. Kent, R. Mzrooei-Sebdani, H. Sedaghat), *JDEA*, submitted 2007.
3. Dynamics of rational difference equations containing quadratic terms, (with M. Dehghan, C. Kent R. Mzrooei-Sebdani, H. Sedaghat), *JDEA*, accepted 2007.
4. Existence and a decoupling technique for the generalized problem of Bolza with multiple varying delays. *Advances of Mathematics and Applied Science. Proceedings of the conference: Geometric Control and Nonsmooth Analysis*, Worldscientific, accepted 2007.
5. Necessary conditions for the neutral problem of Bolza with continuously varying time delay, *J. Math. Anal. & Appl.*, 305 (2005), 513-527.
6. The Decoupling Technique for Continuously Varying Time Delays, (with P. R. Wolenski), *J. Set Valued Analysis*, 12 (2004), 225-239.
7. An Existence Theorem for Neutral Variational Problems of Bolza, (with P. R. Wolenski), *J. Math. Anal. & Appl*., 289 (2004), 260-265.
8. Optimal Control of Neutral Variational Systems, (with P. R. Wolenski), Proceedings of the 4th IFAC Workshop on Time Delay Systems, Rocquencourt, France, 2003.
9. Decoupling Time-Delays, (with P. R. Wolenski), Proceedings of the 41st joint CDC IEEE Conference, Las Vegas, December 2002.

Presentations

1. Control and Optimization, Ardeillers, France. September 6-9, 2007. Title: Differential inclusions and delay. (45min, invited)
2. Geometric Control and Nonsmooth Analysis: A Conference in Honor of the 73rd Birthday of H. Hermes and the 71st Birthday of R.T. Rockafellar, Italy. June 5-9, 2006
   Title: The generalized problem of Bolza and time delay. (20min, invited)
3. Louisiana Conference on Mathematical Control Theory, Baton Rouge LA. May 16-24, 2006 Title: Existence and necessary conditions for the neutral problem of Bolza. (30min, invited)
4. Dynamical Systems Seminar (VCU) September 26, 2005

Title: Differential inclusions and optimal control. (50min)

5. Institute for Mathematics and its Applications (IMA). Career Workshop on Minorities and Applied Mathematics, April 22-25, 2005
   Poster: A decoupling technique and necessary conditions for the neutral problem of Bolza.
6. Association for Women in Mathematics (AWM) Workshop, Joint AMS/MAA Meetings January 8, 2005 Poster: A decoupling technique and necessary conditions for the neutral problem of Bolza.
7. Louisiana Conference on Mathematical Control Theory April 10-13, 2003
   Title: Existence and a Decoupling Method for Neutral Bolza Problems (20min, invited)
8. LSU Optimal Control Seminar November, 2002
   Title: A Decoupling Principle. (20min, invited)
9. National Center for Toxicology Research, August 2001
   Title: Neural Network Optimization through Parallel Distribution. (15 min)

Teaching

1. Independent Study, Math 491 Optimal Control (VCU)
2. Real Analysis I and II, Math 507-508 (VCU)
3. Differential Equations, Math 301 (VCU)
4. Multivariate Calculus, Math 307 (VCU)
5. Calculus and Analytical Geometry II, Math 201 (VCU)
6. Linear Algebra, Math 310 (VCU)
7. Calculus and Analytic Geometry I, Louisiana State University (LSU)
8. Business Calculus, (LSU)
9. College Algebra, (LSU, Baton Rouge Community College)
10. Mathematical Logic, Center for Talented Youth (CTY)- Johns Hopkins University
11. Fundamentals of Computer Science, (CTY)- Franklin and Marshall College