

William Yslas Vélez

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The University of Arizona
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EDUCATION

Undergraduate work and graduate work at The University of Arizona.

Degrees:

1968 B.Sc. in Mathematics

1972 M.Sc. in Mathematics

1975 Ph.D. in Mathematics

Thesis Advisor: Henry B. Mann Thesis Title: A basis for the group of units modulo P^m



Pages from A
Conversation on Prc

and prime ideal factorization in $F(a^{1/m})$.

MAJOR AREAS OF STUDY

Algebraic Number Theory, Elementary Number Theory, Group Theory, Field Theory,
Algebraic Coding Theory, Communication Theory, Signal Processing.

PROFESSIONAL EXPERIENCE

May 2018: Emeritus Professor, Department of Mathematics, The University of Arizona,
Tucson, AZ.

April 2018- present: Associate Director, Math Alliance

July 1989 – May 2018: Professor, Department of Mathematics, The University of
Arizona, Tucson, AZ.

July 2013-Present: Fulbright Specialist Roster Candidate.

August 2003-June 2017: Associate Head for Undergraduate Programs, Mathematics
Department.

April 1998 – May 2018: University of Arizona Distinguished Professor.

January-June 2011: Martin Luther King Visiting Professor, Massachusetts Institute of
Technology, Cambridge, MA.(Appointment canceled due to illness in family)

September-December 2010, Research Affiliate, Massachusetts Institute of Technology,
Cambridge, MA.

1994 - 1999: Director, Southwest Regional Institute in the Mathematical Sciences.
1994 - 1996: President, Society for the Advancement of Chicanos and Native Americans in Science.
Summer 1994: Member of the teaching faculty in the two programs, Making Everybody Count (June, Tucson, AZ) and the Summer Mathematics Institute (June & July, Berkeley, CA)
August 1992 - August 1993: Program Director, Algebra and Number Theory Program, National Science Foundation, Washington, D.C.
Summer of 1992: Consultant, Naval Command, Control and Ocean Surveillance Center, San Diego, CA.
Summers of 1989, 1990, 1991: Consultant, Naval Ocean Systems Center, San Diego, CA.
July 1981 - July 1989: Associate Professor, The University of Arizona, Tucson, AZ.
September 1983 - January 1984: Visiting Professor, Mathematics Institute, University of Heidelberg, Heidelberg, West Germany.
July 1977 - June 1981: Assistant Professor, Department of Mathematics, The University of Arizona, Tucson, AZ.
September 1975 - June 1977: Member of Technical Staff, Sandia Laboratories, Albuquerque, NM.
Summer of 1974: Member of Technical Staff, Mathematics Research Group, Bell Telephone Laboratories, Murray Hill, NJ.
Summers of 1971, 1972, 1973: Member of the teaching staff of the NSF summer institute for high school teachers at The University of Arizona, Tucson, AZ.
September 1970 - August 1975: Graduate Student and Teaching Assistant, Department of Mathematics, The University of Arizona, Tucson, AZ.

MEMBERSHIPS IN PROFESSIONAL SOCIETIES

Mathematical Association of America
Life Member, Society for the Advancement of Chicanos and Native Americans in Science
American Association for the Advancement of Science
American Mathematical Society
Association for Women in Mathematics
Life Member, National Association of Mathematicians

GRANTS

1. National Chicano Council on Higher Education Summer Research Grant, Summer
1980. Faculty Internship Grant funded by the Southwest Resource Center for Science and Engineering at the University of New Mexico, Albuquerque, NM, Summer 1981.
2. National Science Foundation Grant, Studies in Radical Extensions and Number Theory, PRM-8213782, 1982-1984, \$26,359.

3. College of Arts and Sciences Minority Retention Grant for Calculus, 1988-1989, \$12,000; 1989-1990, \$6,788; 1990-1991, \$12,000; and 1991-1992, \$12,000.
4. National Science Foundation Grant to The Southwest Regional Institute in the Mathematical Sciences (SWRIMS) at The University of Arizona, DMS-9412873, 1994-1998, \$1,372,020.
5. National Security Agency, Research Experiences for Undergraduates, MDA 9049511079, 1995-1996, \$22,415.
6. Alfred P. Sloan Foundation Grant to The Society for Advancement of Chicanos and Native Americans (SACNAS, W. Y. Vélez, President), #96-6-23, 1996-1998, \$75,555.
7. National Science Foundation Grant to The Society for Advancement of Chicanos and Native Americans in Science (SACNAS, W. Y. Vélez, President), DMS9632772, 1996-1999, \$92,952.
8. National Institutes of Health to The Society for the Advancement of Chicanos and Native Americans in Science (SACNAS, W. Y. Vélez, President), 1 T36 GM 08635-01, 1996-99, \$485,505.
9. President's Award for Excellence in Science, Mathematics and Engineering Mentoring Program, Washington, D.C., HRD9724886, September 1997, \$10,000.
10. National Science Foundation grant for Computer Science, Engineering and Mathematics Scholarships, DUE 9986899, July 1, 2000 - June 30, 2004, \$499,500. The Co-PIs on this grant are Maria Teresa Vélez, Rick Mercer, Richard Shoemaker, Ray Umashankar, William Yslas Vélez.
11. Co-PI on National Institutes of Health, Minority Access to Research Careers, May 1999-May 2007. The Co-PIs on this grant are March Tischler, Maria Teresa Vélez and William Yslas Vélez. NIH T34 GM 08718, \$1,456,107.
12. Co-PI on National Science Foundation grant for GK-12 Teaching Fellows: Collaboration for the Advancement of Teaching Technology and Science in Schools. The Co-PIs on this grant are Michelle Hall Wallace, James A. Knight, Supapan Seraphin, Michael Wells and William Yslas Vélez, \$540,046.
13. National Science Foundation grant for Computer Science, Engineering and Mathematics Scholarships, DUE 9986899, July 1, 2003 - June 30, 2007, \$400,000. The Co-PIs on this grant are Maria Teresa Vélez, Rick Mercer, Richard Shoemaker, Ray Umashankar, William Yslas Vélez.
14. MAA grant for the organization of the second annual Arizona Mathematics Undergraduate Conference, September 2004-August 2005, \$3,000.
15. National Security Agency grant for the organization of the second annual Arizona Mathematics Undergraduate Conference, September 2004-August 2005, \$4,000.
16. National Science Foundation grant for Undergraduate Scholarships in Integrated Science, DUE-0631193, November 1, 2006-October 31, 2010. The Co-PIs on this grant are Gail D. Burd, Kathleen Dixon, Koen Visscher, Randall M. Richardson, William Y. Vélez. \$500,000.
17. National Science Foundation grant for the Vertical Integration of Graduate

- Education, DMS- DMS-0602173, November1, 2006-October 31, 2010. The CoPIs on this grant are Doug Ulmer, Nicholas Ercolani, William McCallum, Michael Tabor, William Yslas Vélez, \$3,500,000.
18. TENSOR-SUMMA MAA grant: Strengthening Underrepresented Minority Mathematics Achievement in Undergraduate Mathematics. The PIs on this grant are David Savitt and William Yslas Vélez, 2007, \$6150.
 19. TENSOR-SUMMA MAA grant: Strengthening Underrepresented Minority Mathematics Achievement in Undergraduate Mathematics. The PIs on this grant are David Savitt and William Yslas Vélez, 2008, \$5180.
 20. TENSOR-SUMMA MAA grant: Strengthening Underrepresented Minority Mathematics Achievement in Undergraduate Mathematics. The PI on this grant is William Yslas Vélez, 2010, \$4400.
 21. MAA-RUMC grant: Support for SUNMARC Conference, 2011. The PI on this grant is William Yslas Vélez, \$2000.
 22. National Science Foundation grant for The National Alliance for Doctoral Studies in the Mathematical Sciences: Infrastructure, DMS 1242941, Sept 15, 2012- August 31, 2015. The Co-PIs on this grant are Philip Kutzko, Kathryn Chaloner, Aloysius G. Helminck, William Y. Vélez, \$563,292.
 23. National Science Foundation grant for a conference, Transforming STEM Education in Hispanic Serving Institutions - Regional Insights from Arizona and the Southwest. 1748526. August 15, 2017- August 15, 2018. The Co-PIs on this grant are Guadalupe Lozano, Vignesh Subbian, Marla Franco, Anna O'Leary, William Y. Vélez, \$100,000.

HONORS and AWARDS

1. Ford Foundation Fellowship for Mexican-Americans, Academic Year, 1974-75.
2. King/Chavez/Parks Visiting Scholar, University of Michigan, Ann Arbor, January 1988.
3. American Society for Engineering Education Summer Fellowship, 1989, 1990, 1991, and 1992.
4. Excellence in Teaching Award, 1989.
5. College of Science Outstanding Advisor Award, 1989.
6. College of Engineering Outstanding Student Advisor Award, 1990.
7. Outstanding Faculty Member involved in minority retention, awarded by the Assistant Vice President for Minority Student Affairs, 1991.
8. Outstanding Student Club Advisor, 1992.
9. General Workforce System Outstanding Performance Award, National Science Foundation, July 1993.
10. National Science Foundation Director's Equal Opportunity Achievement Award, July 1993.
11. Department of Mathematics, University of Arizona, Outstanding Advisor Award, 1994.

12. College of Science Outstanding Advisor Award, 1996.
13. President's Award for Excellence in Science, Mathematics and Engineering Mentoring Program, Washington, D.C., September 1997.
14. University of Arizona Alumni Association Centennial Achievement Award, April 1998.
15. QEM/MSE Network, Giant in Science Award, February 2005.
16. Salpointe Catholic High School Distinguished Alumni Hall of Fame Award, April 2005.
17. Mathematical Association of America, Certificate of Meritorious Service, January 2006.
18. The University of Arizona Excellence in Academic Advising, Faculty Advisor Award, April 2006.
19. The WISE Leadership Council 2007 Faculty award for diversity in science and engineering, 2007.
20. University of Arizona Hispanic Alumni and the College of Science Distinguished Alumni Award of Excellence, 2007.
21. Fellow, American Association for the Advancement of Science, January, 2009.
22. Peter W. Likins Inclusive Excellence Award, University of Arizona, October 2009.
23. The Victoria Foundation, Dr. Alfredo G. de los Santos, Jr., Outstanding Latino Faculty: Service/Teaching in Higher Education Award, September 2010.
24. Fellow, American Mathematical Society, January 2013
25. Association for Women in Mathematics Gweneth Humphreys Award for Mentorship of Undergraduate Women in Mathematics, January 2014.
26. The William Yslas Vélez Outstanding Science, Technology, Engineering and Mathematics in Higher Education Award, award created by The Victoria Foundation. 2015.
27. MAA Award for Inclusivity, 2020.

PERSONAL BACKGROUND

I was born and raised in Tucson, Arizona. I am married to Bernice Lopez Vélez, also of Tucson.

We have two children, Ana Christina and Andres Antonio.

I have served in the U.S. Naval Reserves, January 1965-January 1974. I was on active duty from March 1968-September 1969; I served aboard the aircraft carriers U.S.S. Yorktown and the U.S.S. Kearsarge as a weather observer.

ADMINISTRATIVE EXPERIENCE

During my tenure at The University of Arizona, I have served on the following departmental Committees: Personnel Committee (2 years), Undergraduate Committee (2 years), Graduate Committee (6 years), Promotion and Tenure Committee (2 years). I

have served on the College of Science Promotion and Tenure Committee (three years). I am currently the Associate Head for Undergraduate Affairs.

Member of the Board, Society for the Advancement of Chicanos and Native Americans in Science, 1990-1993, 1994-1997.

President, Society for the Advancement of Chicanos and Native Americans in Science, 1994-1996.

Member of the Program Committee for the January 1991 meeting of the Mathematical Association of America in San Francisco.

Member of the organizing committee for the first joint meeting of the American Mathematical Society and the Sociedad Matematica Mexicana, Mérida, Yucatan, December 1994.

Member, Committee on Committees, American Mathematical Society, 1990-1992 and 1993-1995.

Member, Newsletter Editorial Subcommittee, Mathematical Association of America, 1992-1995.

Member, Committee on Meetings and Conferences, American Mathematical Society, 1993-1995.

Member, Committee on the Human Rights of Mathematicians, 1994-1997. Council Delegate, Section on Mathematics to the American Association for the Advancement of Science, 1998-2001.

Member, MAA Committee on Minority Participation in Mathematics, 1999-2002.

Governor-at-Large for Minority Interests, Board of Governors of the Mathematical Association of America, 1999-2002.

Member, MAA Gung-Hu Award Selection committee, February 2000-January 2003.

Member, AMS Committee on Academic Freedom, Tenure, and Employment Security, February 2000-January 2003.

Member, MAA Membership Committee, January 2000-January 2003.

Member, Organizing Committee, MAA Annual Meeting, San Diego, CA, 2001.

Member, AMS Committee to Select the Winner of the Award for Public Service, 2001-2006.

Member, MAA Coordinating Council on Awards, 2001-2004.

Member, MAA Development Committee, 2004-2007.

Member, MAA Subcommittee on Early Career Mathematicians, 2005-2011. Member, MAA Committee on the James R. C. Leitzel Lecture, 2008-2011.

Member, College Board-MAA Committee on Mutual Concerns, 2010-2013.

AMS representative to: AMS-ASA-MAA-SIAM Data Committee, 2012-2015.

Governor, Southwestern Section of the MAA, 2012-2015.

Chair: AMS-ASA-MAA-SIAM Data Committee, 2014-2016

Member, AMS Young Scholars Award Committee, 2013-2016.

Member, Head Search Committee, Program in Applied Math, UA, 2015-16.

Steering Committee: PCMI-IAS, 2016-2017

Co-Chair, Diversity Committee, PCMI-IAS, 2016-2017

Member, AMS Menger Prize Committee, Spring 2016

Member, Organizing Committee, ICM Satellite Conference, 2017-2018
Member, Mathematics Learning by Inquiry (MLI) Steering Committee, September 2017-present

I have also served as Chairman of the following committees:

Chairman, University Committee on Financial Aid, 1981-1982.
Chairman, Colloquium Committee, 1982-1983.
Chairman, Graduate Committee, 1985-1987.
Chairman, Southwestern Section of the Mathematical Association of America, 1981-1982, 1984-1985, 2005-2006.

ADVISORY COMMITTEES

Member, Equity 2000 National Advisory Commission of The College Board, 1993-2000.
Member, Educational and Human Resources Advisory Committee of the Mathematical Sciences Research Institute, Berkeley, 1993-2001.
Member, National Science Foundation's Committee on Equal Opportunity in Science and Engineering, 1994-1997.
Member, National Advisory Board, El Paso Partnership for Excellence in Teaching Education, 1995-2000.
Member, National Advisory Board, Interactive Mathematics Program, Rocky Mountain Region, 1995-2000.
Member, National Model Institutions for Excellence Leadership Council, 1996-1998.
Member, Steering Committee, DIMACS Research and Education Institute, Rutgers University, 1997-1999.
Member, National Advisory Committee, Project NEXT, 1997-2000.
Member, National Advisory Committee, National Institute for Science Education, 1998-2000.
Council Delegate of the Electorate of the Section in Mathematics (A) to AAAS, February 1998-February 2001.
Chair, Educational and Human Resources Advisory Committee of the Mathematical Sciences Research Institute, Berkeley, 1999-2001.
Member, Steering Committee of the Mathematical Sciences Research Institute, Berkeley, 1999-2001.
Member, American Association for the Advancement of Science, Committee on Opportunities in Science, 1999-2002.
Member, President's Diversity Advisory Committee, ECMC Corporation, 2000-2006.
Member, Steering Committee for Review of the Evaluation Data on the Effectiveness of NSF Supported Mathematics Curriculum Materials, National Research Council, 2002-2004.
Member, Board of Visitors, Division of Mathematics, Science and Technology, Pima Community College, Tucson. 2004-2007.

Member, Committee of Visitors, Rice University Summer program in Statistics, 2004-2008.

Member, National Advisory Committee, MSPinNYC, Hunter College, NY, NY, 2005-2008.

Member, National Advisory Committee, UA Undergraduate Biology Research Program, 2006-2009.

Member, National Advisory Committee, Access Algebra Project, Oregon Museum of Science and Industry, Portland, OR, 2007-2010.

Member, National Advisory Committee, Gate Foundation Developmental Math Project, 2009-2011

Member, National Advisory Committee, West Texas Middle School Math Partnership (WTMSMP), Texas State University, Lubbock, TX, 2009-2012.

Member, National Advisory Committee, Math Pathways and Pitfall, West ED, Oakland, CA, 2009-2013.

Member, Advisory Board, Achieve Grant, University of San Diego, San Diego, CA, 2012-2016

Co-Director, National Alliance for Doctoral Studies in the Mathematical Sciences, 2012-present.

Member, Advisory Board, S-STEM grant, University of Montana, 2014-present

External Advisor, Graduate Scholars in Mathematics (GSM) at the University of Kentucky, 2014-present.

Member, Advisory Board, Sloan University Center of Exemplary Mentoring, University of Iowa, 2014-2015.

Member, Math Advisory Group, TPSE, 2016-present.

Member, STEM Education Advisory Panel, NSF, 2018-present.

Member, Executive Committee for the STEM Learning Center, University of Arizona, 2018-present.

Member, Julia Robinson Math Festival Advisory Board, 2020-present.

Member, Alliance of Indigenous Math Circles Advisory Board, 2020-present.

Member, Project AnchorSTEM Advisory Board, University of San Diego, 2020-present.

Member, Project Outreach FAMILIA Advisory Board, University of Arizona 2021-present.

Chair, JMM Program Committee, American Mathematical Society 2021-present.

Member, Committee on Committees, American Mathematical Society, 2021-2023.

Member, Committee on Science Policy, American Mathematical Society, 2022-present.

Member, Committee on Education, American Mathematical Society, 2023-2025

INVITED ADDRESSES

Four one-hour talks dealing with Number Theory and Algebraic Coding Theory on the occasion of the 45th Anniversary of the Founding of the Universidad Autonoma de Guadalajara,
Guadalajara, Jalisco, Mexico, June 1980.

Seven one-hour talks dealing with number theory, Sichuan University, Chengdu, Sichuan, Peoples Republic of China, March 1988.

Four one-hour talks dealing with valuation theory and algebraic number theory, Universidad de Sonora, Hermosillo, Sonora, Mexico, April 1989.

James Letizel Lecturer, MAA Summer Math Fast, August 2005.

MAA Sectional Meeting, Poukeepsie, NY, October 2006.

West Virginia Higher Education Mathematics Symposium, April 2008.

Third Annual Math Literacy Summit, University of North Carolina, Asheville, October 2009.

Summit on Latino Student Success, San Antonio, Texas, May 2010.

Field of Dreams Conference, University of Iowa, October 2010.

HSI Math Integration Workshop, Baltimore, MD, 2010.

Center for Undergraduate Research in Mathematics Conference, BYU, Provo, Utah, March 2011.

Jornada de Algebra, Universidad Autónoma de Yucatán, April 2012

Hispanic Heritage Month Celebration, Invited Speaker, South Texas College, McAllen, Texas, September 2012

Invited panelist, STEM Education, Arizona Association of Hispanics in Higher Education, San Antonio, March 2013

Invited panelist, New Directions for Mathematics Research Experience for Undergraduates, Mt. Holyoke College, June 2013.

Invited Speaker, Department of Biostatistics, Harvard University, Summer Workshop for Undergraduates, July 2014.

Invited Speaker, Transforming Post-Secondary Education in Mathematics, Regional Meeting, University of Maryland Baltimore County, November 2014.

Hispanic Heritage Month Celebration, Invited Speaker, University of Alabama, Tuscaloosa, September 2016

Key Note Speaker, Field of Dreams Conference, November 2016

Key Note Speaker, 2018 Gulf States Math Alliance Conference, February 2018.

Invited Speaker, paraDIGMS Fall virtual conference: Diversity in Graduate Mathematical Sciences, 2020.

CONSULTING

Bell Laboratories, August 1983. Presentation on the status and issues of Mexican-Americans entering the scientific fields.

Naval Ocean Systems Center, Summers, 1989, 1990 and 1991. Signal Processing for submarine communication systems.

Naval Command, Control and Ocean Surveillance Center, Summer 1992. Signal Processing for submarine communication systems.

DOCTORAL DISSERTATIONS SUPERVISED

- 1) Maria Teodora Acosta de Orozco, Fields defined by radicals; their torsion group and their lattice of subfields, 1987.
- 2) Fernando Barrera Mora, On radical extensions and radical towers, 1989.
- 3) June Bok Lee, Integral solutions in arithmetic progression for $y^2 = x^3 + k$, 1991.

COLLOQUIA PRESENTED

Sandia Laboratories, Albuquerque, NM, May 1974.

University of Arizona, Tucson, AZ, March 1975 and October 1976.

Sandia Laboratories, Albuquerque, NM, May 1975.

University of New Mexico, Albuquerque, NM, October 1975, September 1976 and November 1994.

University of Texas at El Paso, April 1977, August 1984, November 1994, April 2001, March 2003, and February 2005.

Colorado State University, Fort Collins, CO, February 1978.

University of Colorado, Boulder, CO, February 1978.

Pennsylvania State University, State College, Pennsylvania, December 1979.

University of Heidelberg, Heidelberg, West Germany, September 1983.

University of Tübingen, Tübingen, West Germany, November 1983.

Virginia Polytechnic Institute and State University, Blacksburg, Virginia, April 1984.

Simon Fraser University, Vancouver, BC, Canada, July 1985 and January 1991.

Universidad de Sinaloa, Culiacan, Mexico, December 1985.

Instituto Politecnico Nacional, Mexico City, December 1985, November 1987 and February 1992.

Universidad Nacional Autónoma de México, Mexico City, December 1985, November 1987 and February 1992.

Universidad de Puebla, Puebla, Mexico, December 1985.

Instituto Tecnológico de Durango, Durango, Mexico, August 1986.

University of Nevada, Las Vegas, NV, November 1986.

Universidad de Sonora, Hermosillo, Sonora, Mexico, January 1987 and April 1989.

Universidad Autónoma Metropolitana, Iztapalapa, Mexico City, November 1987 and February 1992.

Instituto Tecnológico Autónoma de México, Mexico City, November 1987.

University of Michigan, Ann Arbor, MI, January 1988 and January 2003.

Michigan State University, East Lansing, MI, January 1988.

Arizona State University, Tempe, AZ, February 1988, October 1994 and February 2009.

Mathematics Institute, Chinese Academy of Sciences, Beijing, P.R.C., March 1988.

Sichuan University, Chengdeu Sichuan, P.R.C., March 1988.

Fudan University, Shanghai, P.R.C., March 1988.

Naval Ocean Systems Center, August 1989 and July 1990.

University of Texas, Pan American, Edinburg, TX, February 1990, January 2005 and September 2012.

Texas A & I University, Kingsville, TX, February 1990.
Universidad de las Americas, Puebla, January 1991.
Universidad Michoacana de San Nicolas de Hidalgo, Morelia, Michoacan, January 1991.
San Diego State University, San Diego, CA, March 1991, May 1991, March 1998, April 2016.
National Science Foundation, Washington, D.C., February, 1993.
University of Maryland, College Park, MD, March 1993.
George Mason University, Fairfax, VA, April 1993.
New Mexico Highlands University, Las Vegas, NM, September 1993.
California State University, Sacramento, CA, March 1994.
DQ University, Sacramento, CA, 1994.
New Mexico State University, Las Cruces, NM, April, 1994, October 1994, and April 2005.
Northern Arizona University, October 1994 and April 2008.
Utah State University, November 1994.
St. Louis University, St. Louis, MO, December 1994 and April 2019.
Universidad Autónoma de Baja California, Ensenada, Baja California, Mexico, March 1995.
San Jose State University, December 1996.
San Francisco State University, November 2000.
Tulane University, November 2001.
Universidad Autonoma de San Luis Potosi, January 2002.
Universidad de Occidente, Culiacan, Sinaloa, March 2002.
Iowa State University, Ames. Iowa. April 2002, April 2009 and October 2010.
University of Illinois, Chicago, January 2003
University of Texas, San Antonio, January 2005
Texas State University, San Marcos, January 2005
Texas A&M, Corpus Christi, January 2005
University of Texas, Brownsville, January 2005
Morehead State University, Morehead, KY, November 2005
University of San Diego, March 2006
Occidental College, March 2006
California State University, Northridge, March 2006
Harvey Mudd College, April 2006
University of Iowa, May 2006 and April 2009
Louisiana State University, May 2007
Hunter College, Manhattan, NY February 2008
Columbia's Teacher College, Manhattan, NY February 2008
Virginia Tech, Blacksburg, Virginia, March 2008
George Washington University, Washington, DC, March 2008
Fairmont State University, Fairmont, West Virginia, April 2008
Illinois Institute of Technology, Chicago, Illinois, April 2008
Clemson University, Clemson, SC, May 2008

Oregon State University, Corvallis, OR, January 2009 & May 2017
 University of North Carolina, Asheville, October 2009
 University of Oklahoma, Norman, OK, December 2009
 Massachusetts Institute of Technology, Boston, MA, April 2010
 University of California, Irvine, CA, October 2010
 University of Charleston, Charleston, SC, April 2011
 University of Montana, Missoula, MT, September 2011
 Florida International University, Miami, FL, September 2011
 Southern University at New Orleans, New Orleans, LA, November 2011
 University of Texas Arlington, Arlington, Texas, January 2012
 Wright State University, Dayton, Ohio, April 2012
 University of Nebraska, Lincoln, Nebraska, September 2012
 South Texas College, McAllen, TX, September 2012
 California State University, Fresno, Fresno, CS, October 2012
 Wayne State University, Detroit, MI, February, 2013
 Jacksonville State University, Jacksonville, AL, March 2014
 University of Georgia, Athens, GA, March 2014
 University of Kentucky, Lexington, KY, April 2014
 University of Nevada, Reno, NV, October 2014
 University of California, Merced, CA, April 2015
 Keane University, Union, NJ, October 2015
 University of Alabama, Tuscaloosa, Al, September 2016
 Purdue University, Lafayette, IN, April 2017
 Oregon State University, Corvallis, OR, Lonseth Lecture, April 2017
 Manhattan College, New York City, April 2018
 University of Washington, October 2018
 Kansas State University, Manhattan, KS, October 2021

MATHEMATICAL PUBLICATIONS

- 1) On Normal Radical Extensions of the Rationals, H. B. Mann and W. Y. Vélez, *Linear and Multilinear Algebra*, 1975, Vol. **3**, pp. 73-80.
- 2) Prime Ideal Decomposition in $F(\mu^{1/m})$, H. B. Mann and W. Y. Vélez, *Monatshefte für Mathematik* **81**, 1976, pp. 131-139
- 3) A Characterization of Completely Regular Fields, W. Y. Vélez, *Pacific Journal of Mathematics*, Vol 63, No. 2, 1976, pp 553-554.
- 4) Some Remarks on a Number Theoretic Problem of Graham, W. Y. Vélez, *Acta Arithmetica*, XXXII, 1977, pp. 233-238.
- 5) Prime Ideal Decomposition in $F(\mu^{1/m})$, II, W. Y. Vélez, *Number Theory and Algebra*, edited by H. Zassenhaus, Academic Press, New York 1977, pp. 331-338.
- 6) Partially Normal Radical Extensions of the Rationals, D. Gay, A. McDaniel, W. Y. Vélez, *Pacific Journal of Mathematics*, Vol. **72**, No. 2, 1977, pp. 403-417.

- 7) Prime Ideal Decomposition in $F(\mu^{1/p})$, W. Y. Vélez, *Pacific Journal of Mathematics*, Vol. **75**, No. 2, 1978, pp. 589-600.
- 8) [Permutations of the Positive Integers with Restrictions on the Sequences of Differences](#), P. J. Slater and W. Y. Vélez, *Pacific Journal of Mathematics*, Vol. **71**, No. 1, 1977, pp. 193-196.
- 9) A Characterization of the Splitting of Algebraic, Inseparable Extensions, M. J. Norris and W. Y. Vélez, *American Mathematical Monthly*, Vol. **85**, No. 5, pp. 338-341.
- 10) Structure Theorems for Radical Extensions of Fields, M. J. Norris and W. Y. Vélez, *Acta Arithmetica* **38**, 1980, pp. 111-115.
- 11) Correction to: Structure Theorems for Radical Extensions of Fields, *Acta Arithmetica* **42**, 1983, pp. 427-428.
- 12) On Normal Binomials, W. Y. Vélez, *Acta Arithmetica* **36**, (1980), pp. 113-124.
- 13) On the Degree of the Splitting Field of an Irreducible Binomial, D. Gay and W. Y. Vélez, *Pacific Journal of Mathematics*, Vol. **78**, No. 1, 1978, pp. 117-120.
- 14) Permutations of the Positive Integers with Restrictions on the Sequence of Differences, II, Peter J. Slater and W. Y. Vélez, *Pacific Journal of Mathematics*, Vol. **82**, No. 2, 1979, pp. 527-531.
- 15) A Note on the Normality of Unramified, Abelian Extensions of Quadratic Extensions, Daniel J. Madden and W. Y. Vélez, *Manuscripta Mathematica* **30**, 1980, pp. 343-349.
- 16) Polynomials that Represent Quadratic Residues at Primitive Roots, Daniel J. Madden and W. Y. Vélez, *Pacific Journal of Mathematics*, Vol. **98**, No. 1, 1982, pp. 123-137.
- 17) The Torsion Group of a Radical Extension, David Gay and W. Y. Vélez, *Pacific Journal of Mathematics*, Vol. **92**, No. 2, 1981, pp. 317-327.
- 18) The Lattice of Subfields of a Radical Extension, María Acosta de Orozco and W. Y. Vélez, *Journal of Number Theory*, Vol. **15**, No. 3, 1982, pp. 388-405.
- 19) Equiprobability in the Fibonacci Sequence, Lee Erlebach and W. Y. Vélez, *Fibonacci Quarterly*, Vol. **21**, No. 3, 1983, pp. 189-191.
- 20) The Notion of Neatness in Torsion Abelian Groups of Finite Rank, W. Y. Vélez, *Commentarii Mathematici Universitatis Sancti Pauli*, Vol. **33**, No. 1, 1984, pp. 99-102.
- 21) The Torsion Group of a Field Defined by Radicals, Acosta de Orozco and W. Y. Vélez, *Journal of Number Theory*, Vol. **19**, No. 2, 1984, pp. 283-294.
- 22) On the Adele Rings of Radical Extensions of the Rationals, Eliot Jacobson and W. Y. Vélez, *Archiv der Mathematik*, Vol. **45**, 1985, pp. 12-20.
- 23) The Factorization of p in $\mathbb{Q}(\quad)$ and the Genus Field of $\mathbb{Q}(a^{1/n})$, W. Y. Vélez, *Tokyo Journal of Mathematics* **11**, No. 1, 1988, pp. 1-19.
- 24) Several Results on Radical Extensions of Fields, W. Y. Vélez, *Archiv der Mathematik*, Vol. **45**, 1985, pp. 342-349.
- 25) A generalization of Schinzel's theorem on radical extension of fields and an application, W. Y. Vélez, *Acta Arithmetica*, 1988, pp. 119-130.
- 26) Uniform distribution of two-term recurrence sequences, W. Y. Vélez, *Transactions of the American Mathematical Society* **301**, No. 1, 1987, pp. 37-45.
- 27) [On a property of cosets in a finite group](#), W. Y. Vélez, *Journal of Algebra* **115**, No. 2, 1988, pp. 412-413.

- 28) Uniform and f -uniform distribution of recurrence sequences over Dedekind Domains, E. Jacobson and W. Y. Vélez, *Journal of Sichuan University* **26**, 1990, pp. 98-103.
- 29) Fields arithmetically equivalent to a radical extension of the rationals, E. Jacobson and W. Y. Vélez, *Journal of Number Theory*, Vol. **35**, No. 31, pp. 227-246.
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