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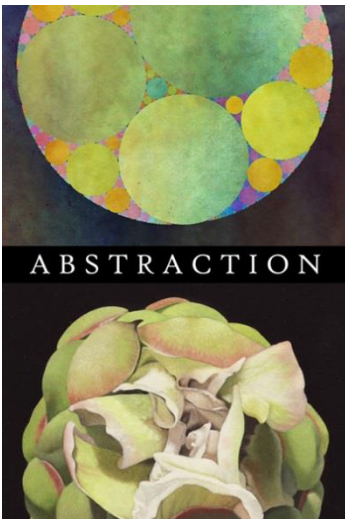
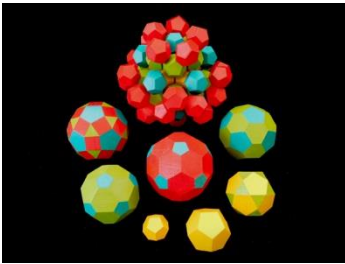
# Michael Luis Ortiz

## Mathematician

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830-333-0164  
mluisortiz8@gmail.com  
Uvalde, Texas



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### EDUCATION

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#### Doctorate of Philosophy in Mathematics

University of Texas at Austin 2009

#### Supported by:

- Ford Foundation Predoctoral Fellowship for Minorities, National Academy of Sciences (2002 – 2005)
- Dean's Excellence Fellowship (2002 – 2003)
- Teaching and Research Assistantships (2003 – 2009)

#### Bachelor of Science Degree in Mathematics with a Minor in Physics

University of North Texas 2002

#### Supported by:

- Regents' Scholarship (1997 – 2001)
- Multicultural Scholarship (1997 – 2001)

Named Outstanding Undergraduate Mathematics Major of the Year in 2001.

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### EXPERIENCE

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#### Mathematics Professor

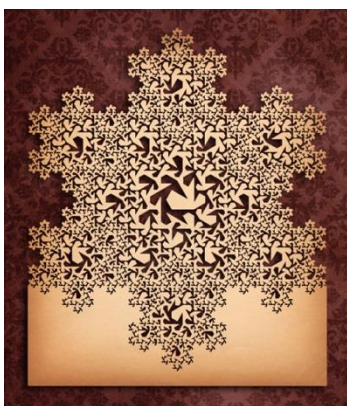
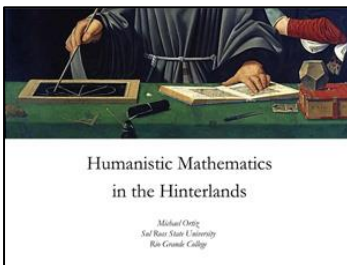
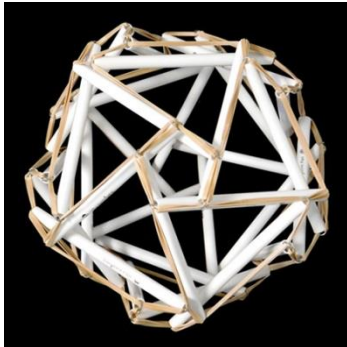
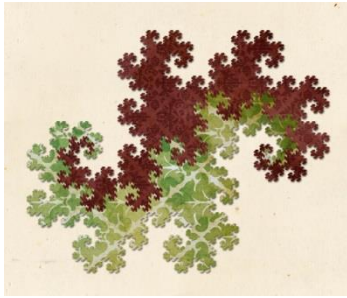
Sul Ross State University Rio Grande 2009 – present  
College (Del Rio, Eagle Pass, and Uvalde campuses)

#### Meritorious Ranking, 2009 – 2019

- Associate Professor: 2015 – present
- Assistant Professor, 2009 – 2015

#### Teaching Experience

- Teaching undergraduate courses on mathematics for elementary educators, Euclidean geometry, conic sections and quadric surfaces, humanistic mathematics, discrete

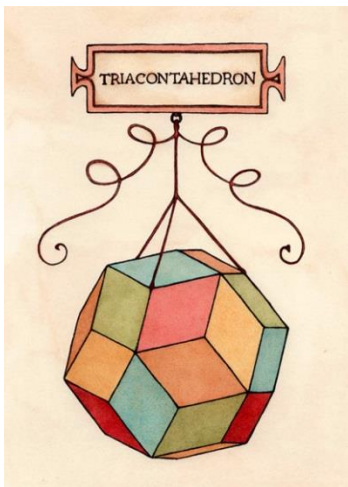
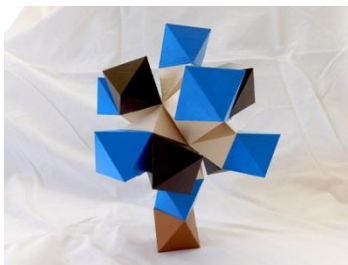


mathematics, multivariable calculus, linear algebra, differential equations, real variables, complex variables, modern abstract algebra, and senior research.

- Developed and piloted graduate courses on abstract algebra, real variables, Lie groups, orthogonal functions and Fourier series, advanced Euclidean geometry, and regular polytopes, with the support of a Title V PPOHA (Providing Post-Baccalaureate Opportunities for Hispanic Americans) grant.
- Developed a course in humanistic mathematics, with explorations in ethnomathematics, gender and ethnicity, George Polya's *How to Solve It*, the art of M. C. Escher, the short stories of Jorge Luis Borges, the life of Srinivasa Ramanujan, G. H. Hardy's *A Mathematician's Apology*, and excerpts by mathematicians down through history; students complete weekly writing responses, participate in a course blog, hold class discussions, and create two- or three-dimensional mathematical artworks.
- Developed a course on conic sections and quadric surfaces based on readings from important texts and incorporating pencil-and-paper constructions, string constructions, solar observation, and other hands-on explorations.
- Developed a capstone readings and research course in which students take turns presenting on topics of their own choice and prepare visual aids and expository material on topics including advanced Euclidean geometry, symmetry groups in ornamental design, surface topology, four-dimensional geometry, developable surfaces, and geodesics.
- Created an undergraduate math experience in which abstract algebra students go on an ornamental symmetry scavenger hunt at the San Antonio Museum of Art.

#### Administrative and Leadership Experience

- Serving fourth (nonconsecutive) term as Faculty Senate President (2014 – 2015, 2015 – 2016, 2018 – 2019, 2019 – 2020), which entails working with faculty and university administration on matters of shared governance and representing the faculty at biannual meetings at the state capital.
- Served two terms as Faculty Senate Secretary (2011 – 2012 and 2012 – 2013).
- Served as chair of the President's Select Task Force on Efficiencies and Innovations in 2018.
- Serve as author and analyst of Institutional Effectiveness Plan for the Bachelor of Science Degree in Mathematics.
- Have served on committees including the Library Advisory Committee, the Curriculum Committee, the Financial Aid Appeals Committee, the Instructional Technology Committee, and the Student Service Fee Advisory Committee.
- Have served on search committees for positions including Professor of English, Professor of Criminal Justice, Academic Dean, and Director of Instructional Technology.



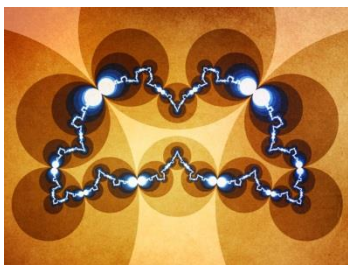
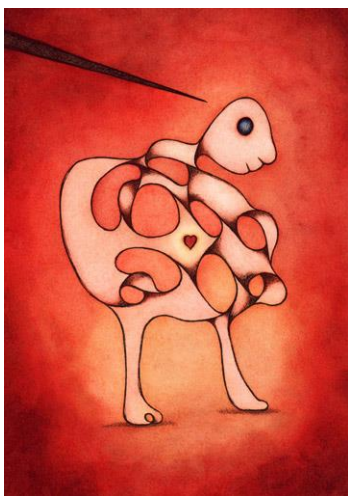
- Assisted in the proposal for and implementation of a Title V PPOHA grant.
- Have served as webmaster for the Department of Natural and Behavioral Sciences.

#### Selected Research and Professional Presentations

- "Math and Culture," Texas Section Conference, MAA, Tarleton State University, March 29, 2019
- "Four-Dimensional Show-and-Tell," Texas Section Conference, MAA, El Centro College, April 6, 2018
- "The Ancient and Modern Art of Conic Sections" (with Patricia Nicosia), Conference for the Advancement of Mathematics Teaching, Fort Worth, Texas, July 10 and 11, 2017
- "Beauty Both Ancient and New: Geometry beyond 'Geometry'" (with Patricia Nicosia), Conference for the Advancement of Mathematics Teaching, San Antonio, Texas, June 29, 2016
- "Humanizing Geometry," Texas Section Conference, MAA, Stephen F. Austin State University, April 1, 2016
- "Humanistic Mathematics in the Hinterlands," Texas Section Conference, MAA, Texas A&M International University, April 4, 2014

#### Selected Conferences Attended

- Inquiry-Based Learning and Teaching Conference, Austin, Texas, 2018
- Texas Section Conference, Mathematical Association of America, El Centro College, 2018
- Conference for the Advancement of Mathematics Teaching, Fort Worth, Texas, 2017
- Conference for the Advancement of Mathematics Teaching, San Antonio, Texas, 2016
- Texas Section Conference, Mathematical Association of America, Stephen F. Austin State University, 2016
- Conference for the Advancement of Mathematics Teaching, Houston, Texas, 2015
- Conference for the Advancement of Mathematics Teaching, Fort Worth, Texas, 2014
- Texas Section Conference, Mathematical Association of America, Texas A&M International University, 2014
- Conference for the Advancement of Mathematics Teaching, San Antonio, Texas, 2013
- Texas Council of Faculty Senates, Austin, Texas, 2011 – 2019
- Texas Topology and Geometry Conference, University of Texas, 2008
- Riemannian Topology Conference, University of New Mexico, 2006
- Texas Topology and Geometry Conference, Texas Tech University, 2005



- Conference of Ford Fellows, Albuquerque, New Mexico, 2002

Selected Columns and Essays

- "[Benjamin Banneker: An Uncommon Mind](#)," *Uvalde Leader-News*, June 21, 2020.
- "[Days, Months, Years: What Is Time?](#)" *Uvalde Leader-News*, May 24, 2020.
- "[Florence Nighingale: The Nurse Who Loved Numbers](#)," *Uvalde Leader-News*, April 26, 2020.
- "You Can Count to a Thousand on Your Fingers," *Uvalde Leader-News*, February 23, 2020.
- "Math, Music and Mysticism: Pythagoreans Believed All Things Are Made of Numbers," *Uvalde Leader-News*, July 7, 2019.
- "[Ortiz Recalls His Abel-Prize Winning Mentor](#)," *Uvalde Leader-News*, May 12, 2019
- "Snowflakes and Dragons: Fractal Geometry of Nature," *Uvalde Leader-News*, March 31, 2019
- "Mathematician Labeled Renegade for Infinity Work," *Uvalde Leader-News*, January 27, 2019.
- "[Border College: The Past, Its Present, Our Future](#)," *Latinx Talk*, October 30, 2018
- "Ortiz Teaching Ethnomathematics: Art and Symmetry," *Uvalde Leader-News*, October 28, 2018
- "How to Count: Numbers are Pebbles of the Mind," *Uvalde Leader-News*, August 26, 2018
- "Fibonacci Numbers: Pinecones and Pineapples," *Uvalde Leader-News*, July 22, 2018
- "[Reflections on Autism, Ethnicity, and Equity](#)," *inclusion/exclusion* (a blog of the American Mathematical Society), June 14, 2018
- "Figures and Parables," *Uvalde Leader-News*, June 3, 2018
- "Myth of the Flat Earth," *Uvalde Leader-News*, May 6, 2018
- "A Wrinkle in Hyperspace: The Tesseract," *Uvalde Leader-News*, April 1, 2018
- "Honeybees and Honeydews: Are Bees Math Wizards?" *Uvalde Leader-News*, February 25, 2018

Art/Math Exhibits

- "Wraparound" (one-man exhibition), Francois Fine Art Gallery, Sul Ross State University, Alpine, Texas, August 21 – September 15, 2017
- One-man exhibition, Art Lab Contemporary Art Space, Uvalde, Texas, September 2016
- One-man exhibition, Casa de la Cultura, Del Rio, Texas, August, 2015
- "Abstraction" (one-man exhibition), Art Lab Contemporary Art Space, Uvalde, Texas, June 2014