TEXAS STATE VITA

I. Academic/Professional Background

A. Name: Jesus Indalecio Ruiz Bolanos Title: Dr. in Mathematics

B. Educational Background

Degree	*Year*	*University*	*Major*	*Thesis/Dissertation*
PhD	2025	Baylor University	Mathematics	Algebraic Structure of Nonlinear Skew Quasicyclic Codes
MA	2021	Baylor University	Mathematics	N/A
BA	2019	Universidad de Guanajuato	Mathematics	Mathematical Models for Muscular Regeneration

C. University Experience
Teacher of Record at Baylor University. August 2020 – December 2021, June 2023 – December 2024.
Research Assistant at Baylor University. January 2022 – May 2023.
Learning Assistant at Baylor University. January 2025 – May 2025.

D. Relevant Professional Experience

E. Other Professional Credentials (licensure, certification, etc.)

II. TEACHING

A. Teaching Honors and Awards:
Outstanding Graduate Student Instructor 2024-2025. Baylor University Department of Mathematics.

B. Courses Taught:
Calculus for Business, Baylor University (F 2020, S 2021, F 2021, F 2023, S 2024.)
Calculus I, Baylor University (F 2024.)

III. SCHOLARLY/CREATIVE

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

1. Articles:

a. Refereed Journal Articles:

J.J. Lee, J.I. Ruiz-Bolanos, Analysis of Robust Hybridized Discontinuous Galerkin Methods for Viscoacoustic Wave Equations, J. Sci. Comput. 102, 89. (2025).

W.Q. Erickson, D. Herden, J. Meddaugh, M. Sepanski, C. Hammon, J. Mohn, I. Ruiz-Bolanos, Young tableau reconstruction via minors, J. Combin. Theory Ser. A. 209 (2025).

J.I. Ruiz-Bolanos, H.V. Kojouharov, F.J. Solis, Theoretical and numerical study of a skeletal muscle regeneration model with inflammatory response, Int. J. Comput. Math. 101 (2024).

W.Q. Erickson, D. Herden, J. Meddaugh, M. Sepanski, I. Echols, C. Hammon, J. Marchena-Menendez, J. Mohn, B. Radillo-Murguia, I. Ruiz-Bolanos, Klein cordial trees and odd cyclic cordial friendship graphs, Discrete Math. 346 (2023).

D. Herden, M. Sepanski, J. Stanfill, C. Hammon, J. Henningsen, H. Ickes, I. Ruiz, Partitions with designated summands not divisible by 2ℓ, 2, and 3ℓ modulo 2, 4, and 3, Integers 23 (2023).

D. Herden, M. Sepanski, J. Stanfill, C. Hammon, J. Henningsen, H. Ickes, J. Marchena-Menendez, T. Poe, I. Ruiz, E. Smith, Counting the parts divisible by k in all the partitions of n whose parts have multiplicity less than k, Integers 22 (2022).

2. Invited Talks, Lectures, and Presentations:

Nonlinear Reed-Solomon codes. 36th Ohio State - Denison Mathematics Conference, Ohio State University (Online), May 2024.

Nonlinear Reed-Solomon codes. Graduate Algebra Symposium. University of Texas at Arlington (Arlington, TX), April 2024.

Nonlinear Reed-Solomon codes. Kansas Mathematics Graduate Student Conference. Kansas State University (Manhattan, KS), April 2024.

Algebraic structure of quasicyclic codes. UAH Math Seminar. University of Alabama at Huntsville (Huntsville, AL), March 2024.

Nonlinear Reed Solomon codes. SIAM Texas-Louisiana Sectional Meeting. University of Louisiana at Lafayette (Lafayette, LA), November 2023.

Who skew you like that, Mr polynomial? Graduate Algebra Symposium. Texas A&M University (College Station, TX), April 2023.

Hey Mr Code, could you please be perfect? AfterMath Colloquium. Rhodes College (Online), September 2022.

Hey Mr Code, could you please be perfect? Graduate Algebra Symposium. University of Texas at Arlington (Arlington, TX), April 2022.

Hey Mr Code, could you please be perfect? Junior Student Seminar. University of Guanajuato (Online), February 2022.

Hey Mr Code, could you please be perfect? Baylor University Algebra Seminar. Baylor University (Waco, TX), December 2021.

Math Models for Muscular Regeneration. Baylor Mathematics Students Seminar. Baylor University (Online), January 2021.

Math Models for Muscular Regeneration. Primer Congreso Creced: Knowlege in Practice (Online), December 2020.

Differential Models for Muscular Regeneration. Scholarship Student Seminar. National Autonomous University of Mexico (Online), June 2020.

Two differential Models for Muscular Regeneration. Junior Student Seminar. University of Guanajuato (Online), May 2020.

Models of Differential Equations in Muscular Regeneration. Junior Student Seminar. University of Guanajuato (Guanajuato, Mexico), February 2019.

3. Workshops:

Macaulay2 workshop. Tulane University, New Orleans, LA. April 14-18, 2025.

4. Other Works not in Print:

a. Works "submitted" or "under review":
D. Bossaller, D. Herden, I. Ruiz-Bolanos, Nonlinear Reed-Solomon codes and nonlinear skew quasi-cyclic codes.
D. Bossaller, D. Herden, I. Ruiz-Bolanos, The Trace Dual of Nonlinear Skew Cyclic Codes.