TEXAS STATE VITA

I. Academic/Professional Background

Name: Cristian Meraz Title: Lecturer

Educational Background

Degree	*Year*	*University*	*Major*	*Thesis/Dissertation*
Ph.D.	2025	U. of Houston	Mathematics	*Existence of Weak and Mild Solutions to a Nonlocal Klausmeier Model*
B.S.	2020	Texas A&M U.	Applied Mathematics	

II. TEACHING

Courses Taught:

At the Department of Mathematics, Texas State University:
- *MATH 2393 Calculus III*, Fall 2025.
- *MATH 2417 Precalculus Mathematics*, Fall 2025.
- *MATH 1319 Mathematics for Business and Economics I,* Three Sections, Fall 2025.

At the Department of Mathematics, University of Houston:
- *MATH 1324 Finite Math with Applications*, Fall 2025.

III. SCHOLARLY/CREATIVE

1. Papers Presented at Professional Meetings:

Existence of Weak Solutions for a Nonlocal Klausmeier Model. Joint Mathematics Meetings, Seattle, WA, January 8—11, 2025.

2. Invited Talks, Lectures, and Presentations:

Existence of Weak Solutions for a Nonlocal Klausmeier Model. SIAM Conference Texas-Louisiana Section, Waco, TX, October 11—13, 2024.

3. Workshops:

Gene Golub SIAM Summer School: Frontiers in Multi-dimensional Pattern Formation, Concordia University, Montréal, Québec, August 3—16, 2025.

Nonlocal School on Fractional Equations, Iowa State University, Ames, IA, June 9—11, 2022.

Other Works not in Print:

a. Works "submitted" or "under review":

G. Jaramillo, **C. Meraz**, "*Existence of Weak Solutions for a Nonlocal Klausmeier Model.*" 2024.

b. Works "in progress":

G. Jaramillo, **C. Meraz**, "*Analysis and Simulations of a Nonlocal Klausmeier Model.*"

Scholarly / Creative Grants and Contracts:

1. Funded External Grants and Contracts:

Partial support via NSF-DMS 2307500, August 2022—August 2025.