# The 8th Coastal Bend Mathematics and Statistics Conference

### Conference Schedule

Saturday, April 6th, 2024 Texas A&M University-Kingsville

- 7:45am 8:45am: Breakfast and Registration, Kleberg Hall 149
- 8:45am 9:00am: Welcoming Words Organizing Committee and
   Dean Dr. Dolores Guerrero, Kleberg Hall 149
- 9:10am 9:45am: Plenary Speaker Devanayagam Palaniappan,
   Kleberg Hall 149
- 10:00am 11:55am: Morning Sessions, Rhode Hall 3<sup>rd</sup> floor
- 12:00pm 1:00pm: Lunch, Javelina Dinning Hall
- 1:15pm 1:50pm: Plenary Speaker Tamer Oraby, Kleberg Hall 149
- 2:00pm 5:30pm: Afternoon Sessions, Rhode Hall 3<sup>rd</sup> Floor
- 5:30pm 6:00pm: Concluding Remarks, Rhode Hall 309

#### Notes:

- 1. The conference schedule is based on the US Central Time Zone (UTC 6:00).
- 2. Each regular talk is scheduled for 25 minutes: 20-minute presentation time and 5-minute question and transition time.
- 3. Poster Presentations will be available in the Hallways of the third floor of Rhode Hall all day.

# Plenary Speaker



Dr Devanayagam Palaniappan, Texas A&M University – Corpus Christi

**Biography:** D. Palaniappan is a Professor of Applied Mathematics in the Department of Mathematics & Statistics at Texas A&M University, Corpus Christi, where he has been since 2010. He is a recipient of Alexander von Humboldt fellowship, a German research grant. He is also affiliated with the Center of Applied Mathematics and Statistics at the New Jersey Institute of Technology as an external faculty member. His areas of interest in research include mathematical biology, physics, engineering, applied mathematics, and mathematics. His current work focuses on the mathematical modeling and comprehension of the hydrodynamic interactions and swimming of microbes in complex fluid settings. Professor Palaniappan will deliver the presentation:

## Mathematical Modeling of Squirming Micro-organisms at Low-Reynolds Numbers

**Abstract:** Artificial and/or biological micro-swimmers that can move and interact with each other at the microscopic scale show great promise in biomedical applications such as drug delivery and microsurgery. Successful application of these interacting swimmers to biomedical tasks relies on their ability to traverse biological fluids with challenging background flow fields. The seminal work by Lighthill Commun. Pure Appl. Math., 109, (1952)] on the propulsion of ciliated microorganisms serves as a reference for many modern studies on swimming of micro-organisms at low Reynolds numbers. In this talk, we discuss mathematical models capturing the swimming characteristics of microbes in various fluid environments.

Email: <u>devanayagam.palaniappan@tamucc.edu</u> Time: 9:10 AM – 9:45 AM, Kleberg Hall 149

#### Morning Session #1, 10 AM - 12:00 Noon

Room: Rhode Hall 309, Chair: CHRISTOPHER TROMBLEY

1. How Does Education Impact a Family's Overall Well-being and Quality of Life? An application of

Ordinal Logistic Regression

**Author(s):** Hongwei Wang, Cody Perry, Saul Cardenas **Affiliation:** Texas A&M International University

Email: hongwei.wang@tamiu.edu

Time: 10 AM - 10:25 AM

2. Mitigating Emissions from Carbon-Intensive Hydropower Systems Through Floating Solar Power

Deployment

Author(s): Areefin UI Hassan Chowdhury, Hansapani Rodrigo, Mingxu Li, Rafael Schmitt, Rafael M.

Almeida

**Affiliation:** University of Texas Rio Grande Valley

Email: areefinulhassan.chowdhury01@utrgv.edu, hansapani.rodrigo@utrgv.edu

Time: 10:30 AM - 10:55 AM

3. On Finite Element Solution of Stress-Strain State in a Strain-Limiting Elastic Body Containing a V-Notch

Author(s): Maria P. Fernando and S. M. Mallikarjunaiah

Affiliation: Texas A&M University-Corpus Christi

Email: fpieo@islander.tamucc.edu
Time: 11:00 AM – 11:25 AM

4. Trajectories of Charged Particles Pairs Settling in A Viscous Fluid

Author(s): Chris Trombley

**Affiliation:** Texas A&M University-Kingsville **Email:** <u>Christopher.Trombley@tamuk.edu</u>

Time: 11:30 AM - 11:55 AM

#### Morning Session #2, 10 AM - 12:00 Noon

Room: Rhode Hall 310, Chair: SIMONA HODIS

1. Effect of Slip on the Oscillatory Stokes Flow Around a Circular Cylinder

**Author(s):** Subarna Biswas & D. Palaniappan **Affiliation:** Texas A&M University-Corpus Christi

Email: sbiswas@islander.tamucc.edu

Time: 10:00 AM - 10:25 AM

2. Mathematics Behind Music Author(s): Simona Hodis

Affiliation: Texas A&M University-Kingsville

Email: simona.hodis@tamuk.edu Time: 10:30 AM – 10:55 AM

**3.** Hilbert-Kunz Theories and Applications **Author(s):** Jesus A. Mendiola Herrera

Affiliation: Texas A&M International University

Email: harag@tamiu.edu
Time: 11:00 AM - 11:25 AM

4. Oscillations in neuronal activity: a neuron-centered spatiotemporal model of the Unfolded Protein

Response in prion diseases
Author(s): Mike Lindstrom

**Affiliation:** University of Texas Rio Grande Valley

Email: mike.lindstrom@utrgv.edu
Time: 11:30 AM – 11:55 AM

#### Morning Session #3, 10 AM - 12:00 Noon

Room: Rhode Hall 332, Chair: MICHAEL MUZHEVE

1. Variable Selection in High-Dimensional Ordinal Quantile Regression Author(s): Mai Dao, Md Sakhawat Hossain and Zhuanzhuan Ma

Affiliation: Wichita State University, Clemson University and University of Texas Rio Grande Valley

Email: mai.dao@wichita.edu
Time: 10:00 AM – 10:25 AM

2. Constrained Quantization and the Conditional Quantization for Probability Distributions

Author(s): Mrinal Kanti Roychowdhury

**Affiliation:** University of Texas Rio Grande Valley

Email: mrinal.roychowdhury@utrgv.edu

Time: 10:30 AM - 10:55 AM

3. A Sufficient Condition for the Hamiltonicity of Vertex Envelopes of Plane Graphs

Author(s): Michael T. Muzheve

Affiliation: Texas A &M University – Kingsville

Email: michael.muzheve@tamuk.edu

Time: 11:00 AM - 11:25 AM

4. Modelling and Simulation Methods in Analysis

Author(s): Daniel Tovar, Jr.

**Affiliation:** Texas A&M International University

Email: harag@tamiu.edu
Time: 11:30 AM - 11:55 AM

#### Morning Session #4, 10 AM - 12:00 Noon

Room: Rhode Hall 333, ONLINE, Chair: ADEN AHMED

1. Exploring the Impact of Latent and Obscure Factors on Left-Censored Data: Bayesian Approaches and

Case Study

Author(s): Pragya Gupta, Arvind Pandey, David D. Hanagal, Shikhar Tyagi

Affiliation: Central University of Rajasthan, Central University of Rajasthan, Savitri Bai Phule Pune

University, Christ Deemed to be University **Email:** shikhar1093tyagi@gmail.com

Time: 10:00 AM - 10:25 AM

2. Exponential Type Estimators Based on Robust Measures of Location

Author(s): Muhammad Abid

Affiliation: Government College University Faisalabad

Email: mabid@gcuf.edu.pk
Time: 10:30 AM – 10:55 AM

3. A Cost-Effective Computational Approach with Non-Response on Two Occasions

Author(s): Shashi Bhushan
Affiliation: University of Lucknow
Email: <a href="mailto:bhushan s@lkouniv.ac.in">bhushan s@lkouniv.ac.in</a>
Time: 11:00 AM – 11:25 AM

**4.** Effect of Measurement Uncertainty on Optimal CUSUM Mean Control Charts **Author(s):** Tahir Munir, David Paul Suda, Abdu R Rahman, Hefin Rowlands

Affiliation: The Aga Khan University, University of Malta, The Aga Khan University, University of South

Wales

Email: tahirmunir677@yahoo.com Time: 11:30 AM – 11:55 AM

#### Morning Session #5, 10 AM - 12:00 Noon

Room: Rhode Hall 342, ONLINE, Chair: SARJINDER SINGH

1. Cheating Detection and Prevalence Estimates in the Indirect Question Techniques

Author: Pier Francesco Perri Affiliation: University of Calabria Email: pierfrancesco.perri@unical.it

Time: 10:00 AM - 10:25 AM

**2.** Estimation from Nonprobability Samples: a Review of Methods and Evidence **Author(s):** Ramón Ferri-García, Jorge Rueda, Beatriz Cobo, María del Mar Rueda

Affiliation: University of Granada

Email: rferri@ugr.es

Time: 10:30 AM - 10:55 AM

3. Combining Techniques to Reduce Social Desirability Bias with those to Reduce Selection Bias

Author(s): Beatriz Cobo, María del Mar Rueda

Affiliation: University of Granada

Email: beacr@ugr.es

Time: 11:00 AM - 11:25 AM

**4.** Methods for integrating probability and non-probability survey data.

Author(s): Jorge Luis Rueda-Sánchez, Beatriz Cobo, Ramón Ferri-García, María del Mar Rueda

**Affiliation:** University of Granada

Email: jorgerueda@ugr.es
Time: 11:30 AM – 11:55 AM

#### Morning Session #6, 10 AM - 12:00 Noon

Room: Rhode Hall 343, ONLINE, Chair: FARANAK RABIEI

**1.** Ratio and Product Type Estimators in Post-stratified Sampling with Measurement Errors

Author(s): Amita Yadav, Sarla Pareek, Narendra Singh Thakur

Affiliation: Banasthali University Email: <a href="mailto:amitayadav73@yahoo.in">amitayadav73@yahoo.in</a> Time: 10:00 AM – 10:25 AM

2. Resilient Regression: Strategies for Handling Outliers and Multicollinearity in Data Analysis

Author(s): Manish Sharma, Banti Kumar and Sunali Mahajan

Affiliation: Sher-e-Kashmir University of Agrilcultural Sciences and Technology

Email: Manish.sharma@zu.ac.ae
Time: 10:30 AM – 10:55 AM

3. Transmission Based association Test for Multivariate Phenotype Using Quasi Likelihood

Author: Hemant Kulkarni, Vishwnath Karad Affiliation: MIT World Peace University Email: hemant.statistics@gmail.com

Time: 11:00 AM - 11:25 AM

**4.** Instability of elastic filaments in a shear flow

Author(s): Agnieszka M. Slowicka, Nan Xue, Pawel Sznajder, Janine Nunes, Howard A. Stone and Maria L.

Ekiel-Jezewska

Affiliation: IPPT PAN, Princeton University, IPPT PAN, Princeton University, Princeton University, IPPT

PAN

Email: mekiel@ippt.pan.pl
Time: 11:30 AM - 11:55 AM

# Plenary Speaker



Dr Tamer Oraby, University of Texas Rio Grande Valley

**Biography:** Dr. Tamer Oraby, an associate professor in the School of Mathematical and Statistical Sciences at The University of Texas Rio Grande Valley, has a wide array of research interests spanning statistical and mathematical modeling. His multi-disciplinary projects extend across biology, data science, ecology, engineering, infectious diseases, mathematics, probability and stochastic processes, social and behavioral sciences, statistics, and other fields. Since joining UTRGV in 2014, Dr. Oraby has taught 23 different courses and published 30 papers in peer-reviewed journals, 2 peer-reviewed book chapters, and 2 proceedings. Before joining UTRGV, Dr. Oraby published 13 papers in peer-reviewed journals, and 2 peer-reviewed book chapters. Dr. Oraby served as a Principal Investigator for two MAA REUs and currently is a co-PI for an NSF REU at UTRGV. Dr. Oraby is a co-PI in other grants, including those funded by AIM-AHEAD-NIH and Welcome Trust from the UK. At the 8<sup>th</sup> Coastal Bend Dr. Oraby will deliver the presentation:

## Berkson Error Adjustment in some Retrospective Cohort Studies

**Abstract:** In this presentation, I will be sharing my research on adjusting for Berkson errors in certain exposure models when using different statistical methods. The work also offers valuable insights for refining assessments of occupational exposure and understanding the relationship between EMF exposure and brain cancer risk. The analysis of various surrogates and Berkson error adjustments highlights the challenges in selecting the most suitable surrogate. Interestingly, the findings suggest no clear connection between lifetime exposure to extremely low-frequency magnetic fields and increased risk of brain cancer, in line with recent epidemiological findings

Email: tamer.oraby@utrgv.edu

Time: 1:15 PM - 1:50 PM, Kleberg Hall 149

#### Afternoon Session #1, 2:00 PM - 4:30 PM

Room: Rhode Hall 309, Chair: REZA AHANGAR

1. Mathematical Models and the Fitzhugh-Nagumo Equation in Neuroscience

Author(s): Jose A. Herrera

Affiliation: Texas A&M International University

Email: <a href="mailto:harag@tamiu.edu">harag@tamiu.edu</a>
Time: 2:00 PM – 2:25 PM

2. Exploring Potential Applications of the Monster Group and Other Simple Sporadic Groups

Author(s): Juan Carlos Nava

**Affiliation:** Texas A&M International University

Email: <a href="mailto:harag@tamiu.edu">harag@tamiu.edu</a>
Time: 2:30 PM – 2:55 PM

3. Weakly Nonlinear Solutions for a Thermo-Solutal Convective Flow in a Porous Medium

Author(s): Dambaru Bhatta

**Affiliation:** University of Texas Rio Grande Valley

Email: dambaru.bhatta@utrgv.edu

Time: 3:00 PM - 3:25 PM

**4.** Power Series Method for Nonlinear Fluid Dynamics Equations

**Author(s):** Vesselin Vatchev

**Affiliation:** University of Texas Rio Grande Valley

Email: vesselin.vatchev@utrgv.edu

**Time:** 3:30 PM - 3:55 PM

5. Probabilistic Modeling of Interactive Species

Author(s): Reza Ahangar

Affiliation: Texas A & M University- Kingsville

Email: reza.ahangar@tamuk.edu

Time: 4:00 PM - 4:30 PM

#### Afternoon Session #2, 2:00 PM - 4:30 PM

Room: Rhode Hall 310, HYBRID, Chair: YI-FAN HSU

1. A Robust Bootstrap Control Chart for the Log-Logistic Percentiles

Author(s): Zhuanzhuan Ma, Chanseok Park, Min Wang

Email: University of Texas Rio Grande Valley, Pusan National University, University of Texas at San

Antonio

Email: zhuanzhuan.ma@utrgv.edu

Time: 2:00 PM - 2:25 PM

2. New Methods for Imbalanced Data Classification

Author(s): Yi-fan Hsu

Affiliation: Texas A&M University-Kingsville

Email: <u>Yi-fan.hsu@tamuk.edu</u> Time: 2:30 PM – 2:55 PM

3. Analyzing the Nerves System Using the Fitz-Hugh-Nagumo Model

Author(s): Arianna E. Ortiz

**Affiliation:** Texas A&M International University

Email: harag@tamiu.edu
Time: 3:00 PM - 3:25 PM

**4.** Generating Heat Maps for Turbulence - Imputing Turbulence Readings Through Spatio-Temporal

weighting

Author(s): Joel Williams

Affiliation: University of Texas Rio Grande Valley

Email: joel.williams01@utrgv.edu

Time: 3:30 PM - 3:55 PM

5. The UN Genocide Convention and the USBP Immigration Checkpoints in South Texas: A Knowledge-

Based Application
Author(s): Colin Wark

Affiliation: Texas A&M University-Kingsville

Email: colin.wark@tamuk.edu
Time: 4:00 PM – 4:25 PM

**6.** Accelerated Destructive Degradation Tests with Interaction Effects

Author(s): Ankush Sharma, Sanjeev K. Tomer, M S Panwar

**Affiliation:** Banaras Hindu University

Email: ankushsharma.statistics@gmail.com

Time: 4:30 PM – 4:55 PM Note: Online Session

#### Afternoon Session #3, 2:00 PM - 5:00 PM

Room: Rhode Hall 332, Chair: LIHUA ZUO

**1.** Analysis and Comparison of Equilibrium Height Growth Models for Fracture Propagation in Formations

with Multiple Layers

Author(s): Lihua Zuo, Kan Wu

Affiliation: Texas A&M University-Kingsville, Texas A&M University

Email: <u>lihua.zuo@tamuk.edu</u>
Time: 2:00 PM – 2:25 PM

**2.** On the Mathematical and Computational Issues of Modeling Fracture in Porous Elastic Solids Whose

Material Moduli Depend Upon the Density

Author(s): S. M. Mallikarjunaiah

Affiliation: Texas A&M University - Corpus Christi

Email: m.muddamallappa@tamucc.edu

Time: 2:30 PM - 2:55 PM

**3.** Critical Appraisal of Multidrug Therapy in the Ambulatory Management of Patients with COVID-19 and

Нурохетіа

Author(s): Eleftherios Gkioulekas, Peter A. McCullough and Colleen Aldous

Affiliations: University of Texas Rio Grande Valley, McCullough Foundation and Chief Medical Officer of

Truth for Health Foundation, University of KwaZulu-Natal

Email: eleftherios.gkioulekas@utrgv.edu

Time: 3:00 PM - 3:25 PM

**4.** A New Randomized Response Two Deck Card Model

**Author:** Oluwatosin Lawal

**Affiliation:** Texas A&M University – Kingsville **Email:** oluwatosin.lawal@students.atmuk.edu

Time: 3:30 PM - 3:55 PM

5. Impact of Imbalanced and Balanced Data for AI/Machine Learning in Cyberattack Detection Problem

**Author(s):** Dipok Deb, Hansapani Rodrigo, SJ Kumar **Affiliation:** University of Texas Rio Grande Valley

Email: dipok.deb01@utrgv.edu
Time: 4:00 PM – 4:25 PM

6. Optimization of SOX2 Expression for Enhanced Glioblastoma Stem Cell Virotherapy

**Author(s):** Abraham Puig and Dongwook Kim **Affiliation:** Texas A&M University – Kingsville

Email: dongwook.kim@tamuk.edu

Time: 4:30 PM - 5:00 PM

#### Afternoon Session #4, 2:00 PM - 4:30 PM

Room: Rhode Hall 333, Chair: BETTY FOWLER

**1.** A Glimpse of Hopf Bifurcation with Respect to the Fitz-Hugh-Nagumo Equations

Author(s): Mauricio Loera

**Affiliation:** Texas A&M International University

Email: <a href="mailto:harag@tamiu.edu">harag@tamiu.edu</a>
Time: 2:00 PM – 2:25 PM

2. Describing the Lifecycle Dynamics of Lithium-Ion Batteries (LIBs)

Author(s): Kristen Hallas, Tamer Oraby

**Affiliation:** University of Texas Rio Grande Valley

Email: kristen.hallas01@utrgv.edu

Time: 2:30 PM - 2:55 PM

3. Analytical Considerations for Longitudinal Analysis of eGFR in Patients after Lung Transplantation

Author(s): Kristina Vatcheva, Dina Abdelwahab

Affiliation: University of Texas Rio Grande Valley, Cairo University

Email: kristina.vatcheva@utrgv.edu

Time: 3:00 PM - 3:25 PM

4. An Extent of Children's Health Coverage: Medicaid, CHIP, and Beyond

Author(s): Alberto Gonzalez

**Affiliation:** Texas A&M International University

Email: <a href="mailto:harag@tamiu.edu">harag@tamiu.edu</a>
Time: 3:30 PM - 3:55 PM

5. Advanced SAS Programming

**Author(s):** Purnachandrasekhar Rao Bellamkonda **Affiliation:** Texas A&M University – Kingsville

Email: <u>purnab6581@gmail.com</u> Time: 4:00 PM – 4:25 PM

#### Afternoon Session #5, 2:00 PM - 5:30 PM

Room: Rhode Hall 342, ONLINE, Chair: SARJINDER SINGH

1. Monitoring Small Variation of a Non-Normal Process with an application on Wind Speed Data.

Author(s): Mizanur Rahman Mukta, Pear Hossain

Affiliation: Bangabandhu Sheikh Mujibur Rahman Science & Technology University, The University of

Hong Kong

Email: mizanurrahmanmukta@gmail.com

**Time:** 2:00 PM - 2:25 PM

2. Nonlinear Stability Analysis of Double-Diffusive Convection in a Kelvin-Voigt Fluid

Author(s): Mahanthesh Basavarajappa, Dambaru Bhatta

Affiliation: University of Texas Rio Grande Valley

Email: mahanthesh.b@utrgv.edu

Time: 2:30 PM - 2:55 PM

**3.** What Most Affects the Probability of Receiving Public Assistance? Examining the Effect of Family Background and Educational Attainment on Receiving Public Assistance with Multivariate Regression Analysis

Author(s): Patricia I. Vargas

**Affiliation:** Oregon State University

Email: vargasp@lifetime.oregonstate.edu

Time: 3:00 PM - 3:25 PM

4. An Evaluation of Feature Selection Methods in Machine Learning in the Presence of Class Imbalance

**Author(s):** Martha Asare, Rodrigo Hansapani **Affiliation:** University of Texas Rio Grande Valley

Email: martha.asare01@utrgv.edu

Time: 3:30 PM - 3:55 PM

5. A Brief Study on Higher Order Moments of the Estimator of Proportion Using Warner's Model

Author(s): Srikar Govardhana

**Affiliation:** Texas A&M University – Kingsville

Email: govardhanasrikee@gmail.com

Time: 4:00 PM - 4:25 PM

6. Study of Growth Complexity in Large Cervix Deformations

Author(s): Kun Gou

Affiliation: Texas A&M University-San Antonio

Email: kgou@tamusa.edu
Time: 4:30 PM – 4:55 PM

7. Bias of Propensity Score Matching due to Effect Modification with Confounding

Author(s): Xuan Wang, Tamer Oraby, Helmut Schneider

Affiliation: University of Texas Rio Grande Valley

Email: xuan.wang@utrgv.edu
Time: 5:00 PM – 5:25 PM

#### Afternoon Session #6, 2:00 PM - 5:30 PM

Room: Rhode Hall 343, ONLINE, Chair: CHRIS TROMBLEY

**1.** Comparative Analysis of Rice Genotype Classification Using Statistical and Artificial Neural Network

Models

Author(s): Manish Sharma and Shavi Gupta

Affiliation: Sher-E- Kashmir University of Agricultural Sciences & Technology Jammu

Email: manshstat@gmail.com Time: 2:00 PM – 2:25 PM

2. Emerging Trends in Digital Health Technologies: Revolutionizing Data Collection and Analysis in

Clinical Trials

**Author(s):** Shivashankar Thati

Affiliation: Techdata Services Company LLC

Email: ssthati@outlook.com Time: 2:30 Pm – 2:55 PM

3. Features Selection in Regression Models Using Variance-based Sensitivity Analysis

Author(s): Jakob Spiller, Nahid Hasan

**Affiliation:** Texas A&M University – Commerce

Email: nahid.hasan@tamuc.edu
Time: 3:00 PM – 3:25 PM

**4.** Detecting Change Points in Non-linear Curves of Longitudinal Data with Irregularly Spaced Intervals:

Leveraging Smoothing Techniques

Author(s): Jobayer Hossain

**Affiliation:** Nemours Children's Hospital

Email: jhossain@nemours.org
Time: 3:30 PM – 3:55 PM

**5.** Third Wave, Decoding Egyptian Fractions

Author(s): Milo Gardner

Author(s): California State University, Fullerton

Email: milogardner@yahoo.com Time: 4:00 PM – 4:25 PM

**6.** Modify the LASSO Regression Model via its Bayesian Interpretation

**Author(s):** Gayan Warahena-Liyanage **Affiliation:** University of Dayton

Email: gwarahenaliyanage1@udayton.edu

Time: 4:30 PM - 4:55 PM

7. Detecting Change Points in Non-linear Curves of Longitudinal Data with Irregularly Spaced Intervals:

Leveraging Smoothing Techniques

Author(s): Jobayer Hossain

Affiliation: Nemours Children's Hospital

Email: jhossain@nemours.org
Time: 5:00 PM – 5:25 PM

#### **Poster Session**

Rhode Hall, 3<sup>rd</sup> Floor Hallways

1. B-CNN for Early Alzheimer Disease Detection in MRI Scans

Author(s): Mohammad Rafsan

Affiliation: University of Texas Rio Grande Valley

Email: mohammad.rafsan01@utrgv.edu

2. Oscillations in neuronal activity: a Neuron-Centered Spatiotemporal Model of the Unfolded Protein

Response in Prion Diseases
Author(s): Omar Sharif

Affiliation: University of Texas Rio Grande Valley

Email: omar.sharif01@utrgv.edu

3. Estimation of Treatment Effects with Missing Observations in Crossover Clinical Trials

Author(s): Gajendra K. Vishwakarma

Affiliation: Indian Institute of Technology Dhanbad

Email: vishwagk@iitism.ac.in

4. Numerical Analysis of Fractional Differential Equations

Author(s): Faranak Rabiei

**Affiliation:** Texas A&M University – Kingsville

Email: faranak.rabiei@tamuk.edu

5. Taking Chances: The Analysis of Simplified Parcheesi

Author(s): Aden Ahmed

**Affiliation:** Texas A&M University – Kingsville

Email: aden.ahmed@tamuk.edu

**6.** Comparison Between Multiple Sensitive Characteristics (CBMSC)

**Author(s):** Daniel Arias and Sarjinder Singh **Affiliation:** Texas A&M University-Kingsville

Email: darias@students.tamuk.edu