Seminar Invitation: Incommensurate non-homogeneous system of fuzzy linear fractional differential equations using the fuzzy bunch of real functions

Speaker: **Ghulam Muhammad** from Department of Mathematics, University of the Punjab, Lahore

Speakers' Brief Introduction

Mr. Ghulam Muhammad is a PhD scholar working under the supervision of Prof. Dr. Muhammad Akram. The field of research of a student is Pure Mathematics, specializing in Fuzzy Differential Equations.

Abstract

The aim of this talk is to introduce and investigate the analytical fuzzy solution of the incommensurate nonhomogeneous system of fuzzy linear fractional differential equations (INS-FLFDEs) using trivariate Mittag-Leffler functions. In this study, the entries of the coefficient matrix of the given system are treated as real numbers, initial-values are triangular fuzzy numbers (TFNs), and the forcing function is a fuzzy set (or a bunch) of real function. We formulate the fuzzy initial value problem as a set of classical initial value problems by taking the forcing function from the class of FBoRFs and the initial value from the collection of TFNs (as a special case). The originality of the proposed technique is that the uncertainty is smaller compared to the uncertainty extracted from other techniques.

Departmental Seminar Series

The Seminar Series serves as a platform to showcase and celebrate the remarkable work carried out by our researchers, scholars, and experts. It provides an avenue for knowledge dissemination and collaboration, creating an environment that nurtures innovative ideas and drives groundbreaking research. We proudly acknowledge and celebrate the remarkable contribution of Prof. Dr. Muhammad Sharif in introducing this seminar series back in 2005. The Seminar Series encompasses a wide range of topics, spanning various disciplines, ensuring that it caters to our institute's community's diverse interests and expertise. Through these seminars, we aim to cultivate an environment of intellectual curiosity, stimulating meaningful discussions, and fostering interdisciplinary collaborations.
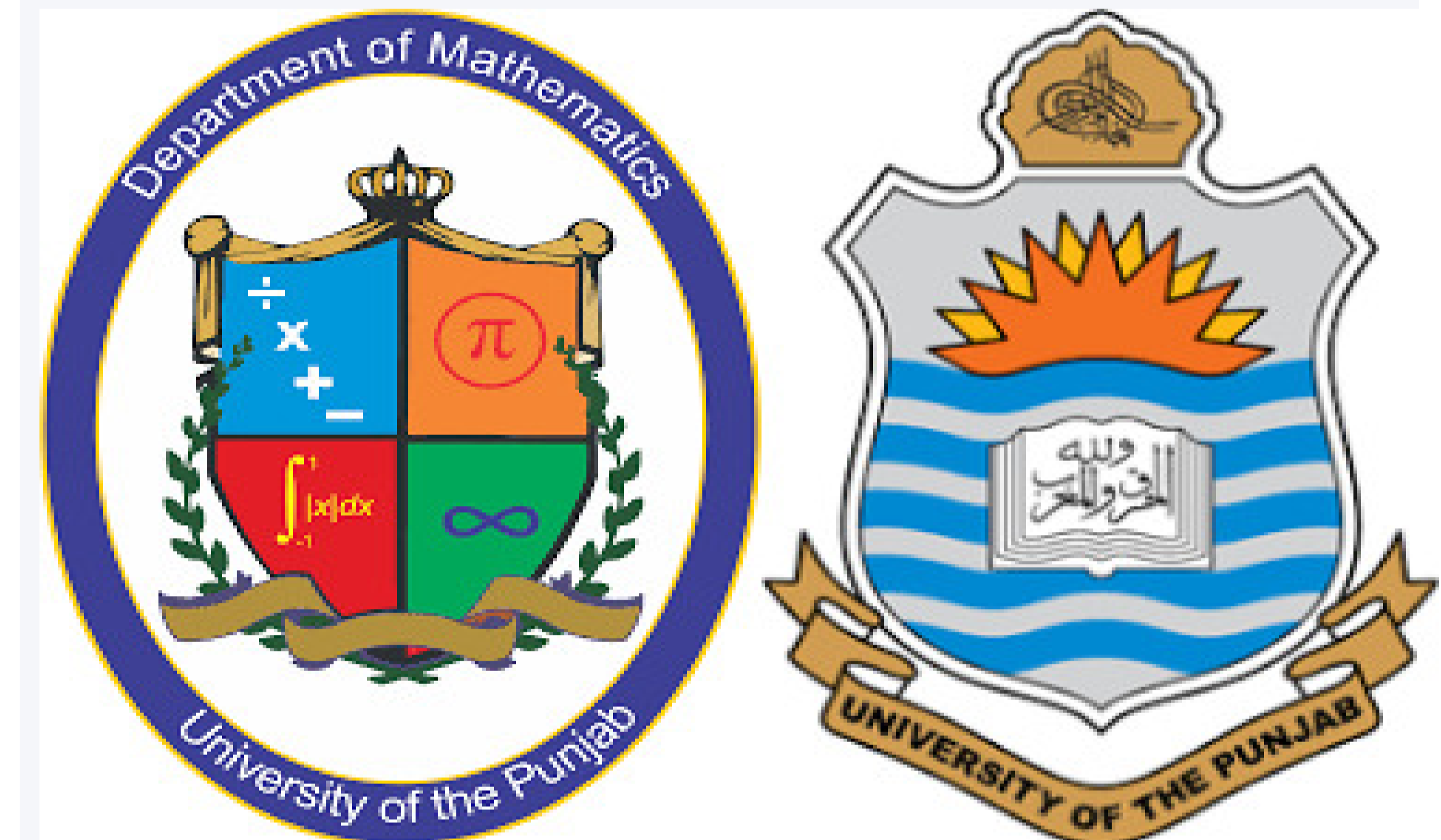

Please join us for this Presentation

When: Wednesday 9th August 2023; 1400-1430
Where: Computer Lab, Department of Mathematics, University of the Punjab, Lahore
Note: All faculty members and research scholars (MPhil/PhD) are invited to attend this seminar.

Chairman Message

It is my honor to witness the passion and dedication that our faculty and students bring to the study of this beautiful discipline. I encourage our faculty members to create a supportive environment that nurtures and promotes mathematical research. I urge each and every one of you, regardless of your level of experience, to actively participate in mathematical research and contribute to the growth of our research community. It is our collective responsibility to create an ecosystem that encourages and facilitates research pursuits.

Coordinator Departmental Seminar Series

Dr. Zeeshan Yousaf
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