Seminar Invitation: Exact traveling wave solutions of (2+1)-dimensional extended Calogero-Bogoyavlenskii-Schiff equation

Speaker: **Rimsha Latif** from Department of Mathematics, University of the Punjab, Lahore

Speakers' Brief Introduction

Ms. Rimsha Latif is an MPhil Scholar working under the supervision of Prof. Dr. Ghazala Akram. The field of research of a student is Computational Mathematics, specializing in Nonlinear Partial Differential Equations.

Astract

The (2+1)-dimensional extended Calogero-Bogoyavlenskii-Schiff equation appears in the mathematical description of physical phenomena in plasma physics, fluid dynamics, and nonlinear optics. In this talk, we observe the dynamical structures exhibiting the solitary wave behavior of the considered model. The traveling wave hypothesis is employed to extract explicit closed-form solution expressions. In order to investigate the behavior of these solutions, 3D, 2D, and density plots are drawn for different values of parameters. The graphical observations depict kink soliton, dark-bright singular soliton, and periodic wave solutions.

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 the diverse interests and expertise of our institute's community. Through these seminars, we aim to cultivate an environment of intellectual curiosity, stimulating meaningful discussions, and fostering interdisciplinary collaborations.
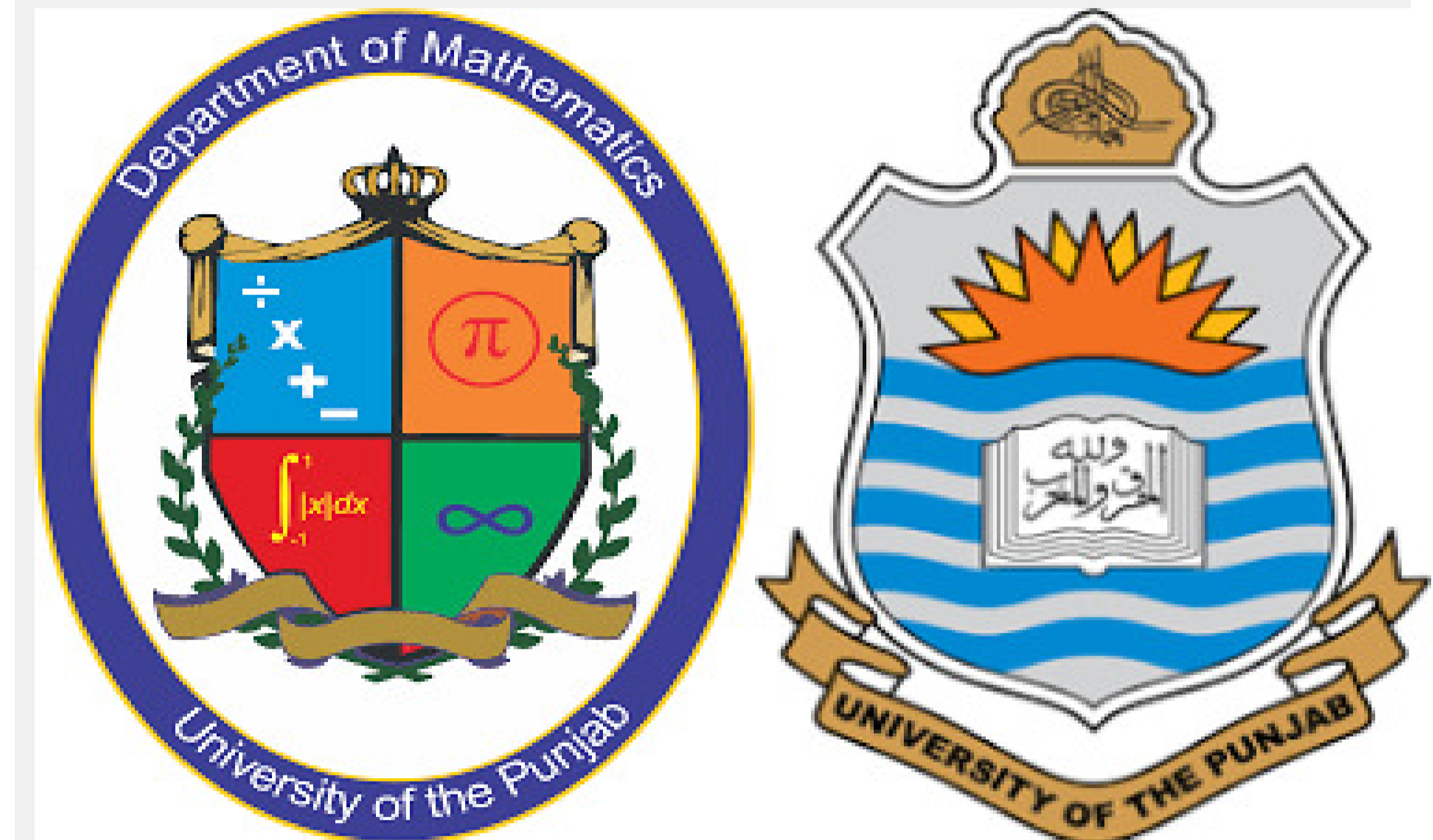

Please join us for this Presentation

When: Wednesday 5th July 2023; 02:45PM- 03:00PM
Where: Computer Lab, Department of Mathematics, University of the Punjab, Lahore
Note: All the faculty members and research scholars (MPhil/PhD) are invited to the 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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