Seminar Invitation: Soliton Solutions of Thin-film Ferroelectric Material

Speaker: **Andleeb ul Nabi** from Department of Mathematics, University of the Punjab, Lahore

Abstract

This study examines the thin-film ferroelectric material equation via the two most efficient and reliable integrating schemes. These schemes include the (G′/G, 1/G)-expansion method and the generalized Kudryashov method. The thin-film ferroelectric material equation plays a crucial part in physics, optics, and other branches of science. The traveling wave transformation converts the governing model into an ordinary differential equation. The suggested methods extract hyperbolic, trigonometric, and rational function solutions. Constraint conditions for the validity of obtained solutions are also discussed. Moreover, for appropriate parametric values, acquired findings are displayed via contour, 2D and 3D graphics showing the proposed equation's physical relevance and dynamical behaviors.

Speakers' Brief Introduction

Ms. Andleeb ul Nabi is an MPhil Scholar working under the supervision of Dr. Saima Arshed. The field of research of a student is Computational Mathematics, specializing in Analytical Solutions of Partial Differential Equations.
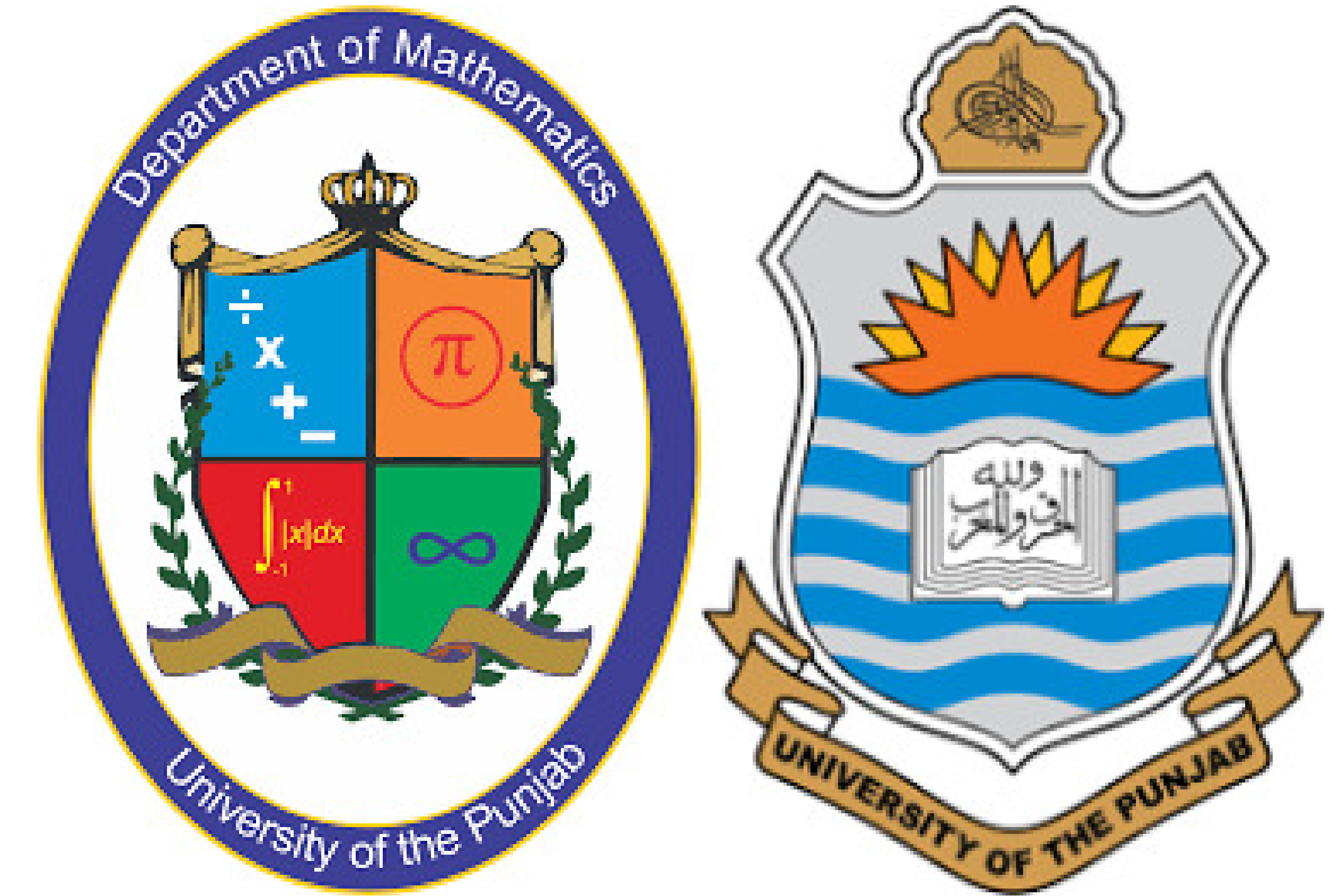
Departmental Seminar Series

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 promoting interdisciplinary collaborations.

Please join us for this Presentation

When: Monday 10th July 2023; 02:00PM-02:15PM
Where: Computer Lab, Department of Mathematics, University of the Punjab, Lahore
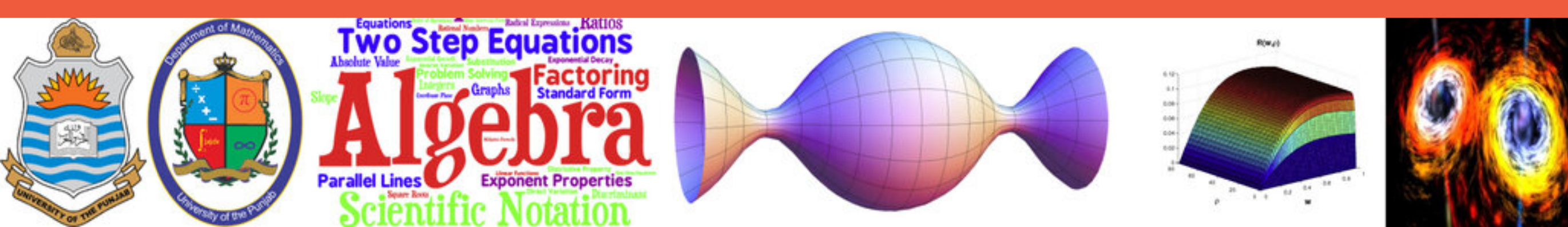
Chairman Message

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
Associate Professor
Department of Mathematics, University of the Punjab, Lahore