

Seminar Invitation: Optical Solitons and Other Solutions of Cubic–Quartic Fokas-Lenells Equation

Speaker: **Ejaz Hussain** from Department of Mathematics, University of the Punjab, Lahore

Speakers' Brief Introduction

Mr. Ejaz Hussain is an MPhil scholar working under the supervision of Dr. Maa-soomah Sadaf. The field of research of a student is Computational Mathematics, specializing in Differential Equations.



Abstract

In the area of nonlinear wave physics, the study of solitons has attracted a lot of interest because of its exceptional characteristics and wide-ranging applications. Solitons defy the ideas of dispersion and dissipation by being self-reinforcing wave packets that may keep their shape and speed while moving through a medium. This talk presents the basic ideas, mathematical models, and scientific applications of soliton theory in order to provide a thorough understanding of the subject and investigate the exact solitons and other solutions of a cubic–quartic Fokas-Lenells equation using two versatile technique namely, extended (G'/G^2) -expansion technique and modified auxiliary equation approach.

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.



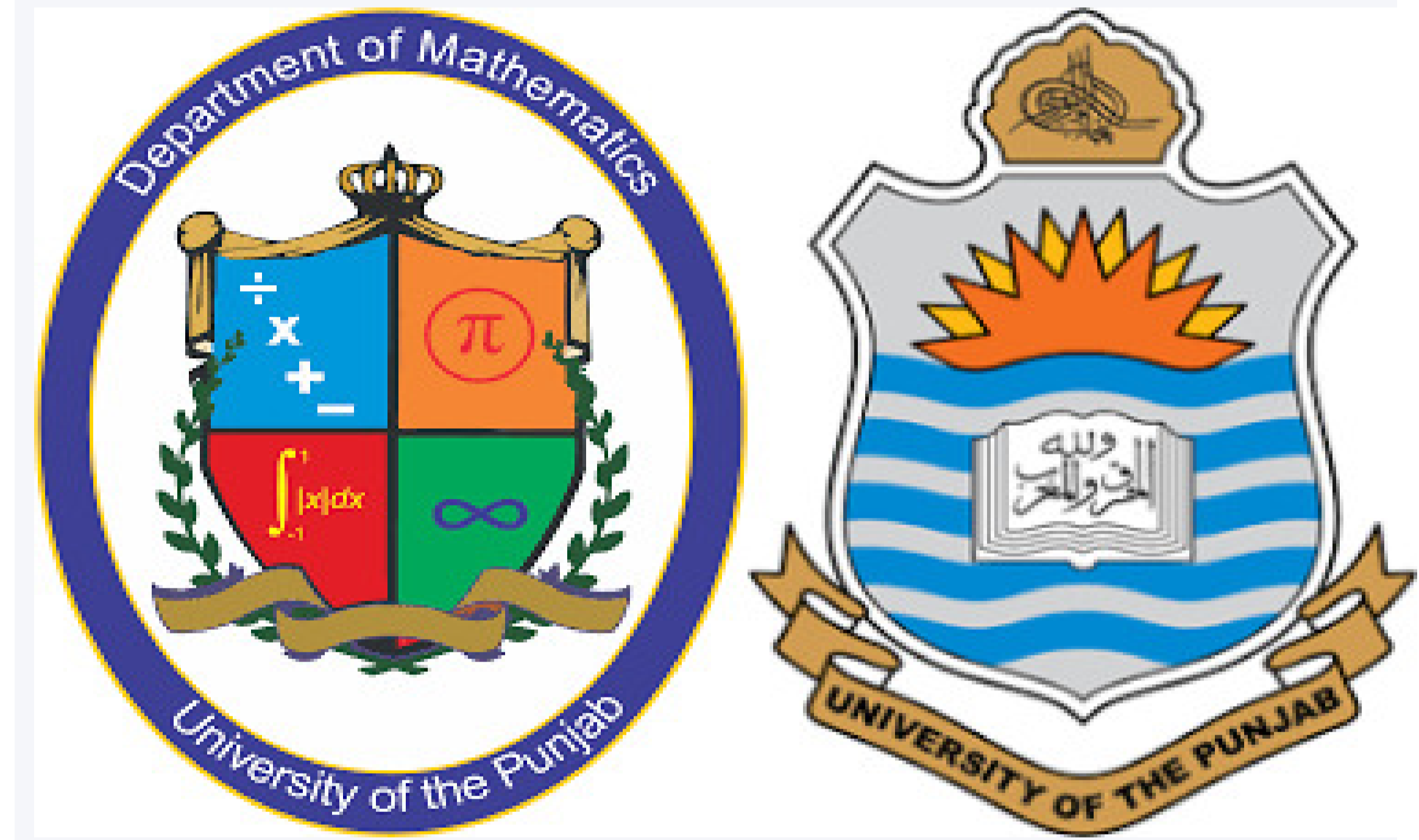
Please join us for this Presentation

When: Wednesday 12th July 2023; 09:00AM-09:15AM

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

Associate Professor

Department of Mathematics, University of the Punjab, Lahore