Seminar Invitation: Investigating compact stars with alternative gravity theories

Speaker: **Maham Ilyas** from Department of Mathematics, University of the Punjab, Lahore

Abstract

This presentation focuses on the one of the alternative gravity theories, $f(R)$ gravity theory to study the characteristics and stability of compact stars (CS) to examine the various aspects, including the collapse of spherical bodies, equilibrium configurations of polytropic CS, and the behaviour of rotating CS with spin-induced quadrupole moments. The objective of this talk is to provide insights into the underlying framework of alternative gravity theories, utilizing popular models for corrections. Furthermore, we aim to explore the internal structure and properties of seven-star candidates.

Speakers' Brief Introduction

Ms. Maham Ilyas is an MPhil scholar working under the supervision of Dr. Daud Ahmad. The field of research of a student is Mathematics, specializing in Geometry.

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.
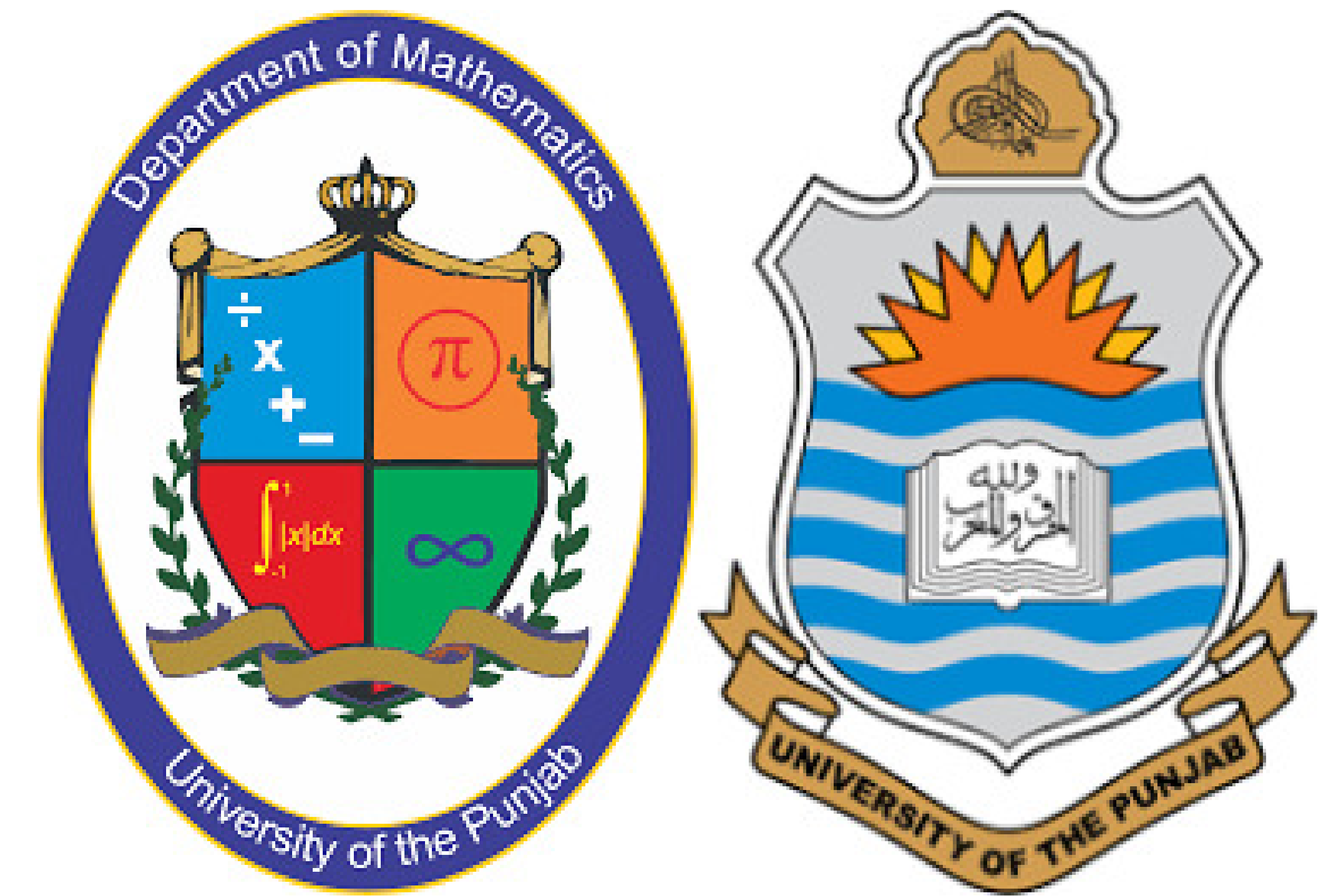

Please join us for this Presentation

When: Wednesday 12th July 2023; 10:00AM-10:15AM

Where: Computer Lab, Department of Mathematics, University of the Punjab, Lahore
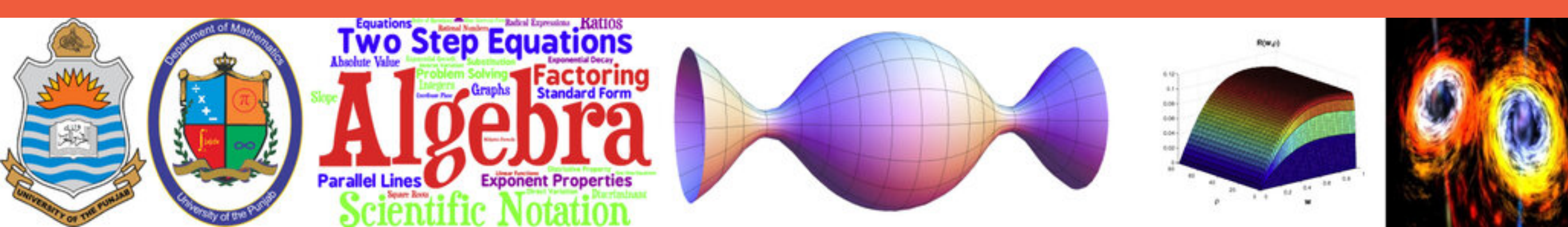
Chairman Message

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