

# Seminar Invitation: Static and spherically symmetric wormholes in power-law gravity model

Speaker: **Huzafa Aman** from Department of Mathematics, University of the Punjab, Lahore

## Abstract

We are focusing on a gravitational theory formulated in metric formalism, presuming time-independent metric coefficients, and exploiting the well-established Morris-Thorne space-time framework. We thoroughly derived exact solutions for traversable WHs that graciously adhere to energy and pressure constraints, assuming some specific functions. Conclusively, our findings open up the possibility of constraining the parameters associated with WH solutions. Importantly, we found that the existence of exotic matter was necessary to satisfy the stability and traversable criteria for WHs in all the cases we analyzed.

## Speakers' Brief Introduction

Mr. Huzafa Aman is a Ph.D. scholar working under the supervision of Dr. Zeeshan Yousaf. The field of research of a student is Applied Mathematics, specializing in Mathematical Cosmology.



## 40th 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 recent research.



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.



## Seminar Schedule

**Please join us for this Presentation**

**Day & Date:** Wednesday; October 16, 2024

**Time:** 03:00PM

**Venue:** Seminar Hall, Department of Mathematics, University of the Punjab, Lahore

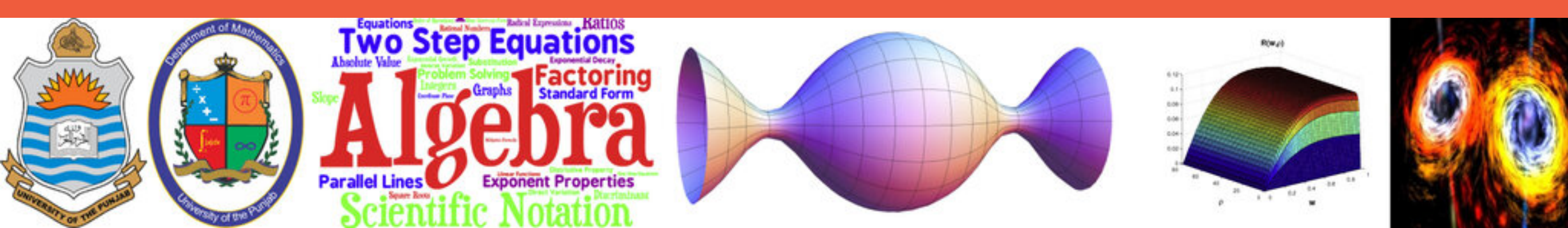
## Coordinator Departmental Seminar Series

I strongly encourage all students to actively engage and contribute to this enriching academic discussion. Your participation is key to a dynamic and productive seminar.

**Dr. Zeeshan Yousaf**

Associate Professor

Department of Mathematics, University of the Punjab, Lahore



All the faculty members and research scholars (MPhil/PhD) are invited to the seminar

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