

Seminar Invitation: Modeling of complex cosmological configurations evolving in the quasi-homologous regime

Speaker: **Suraj Khan** from Department of Mathematics, University of the Punjab, Lahore

Speakers' Brief Introduction

Mr. Suraj Khan is a PhD scholar working under the supervision of Dr. Zeeshan Yousaf. The field of research of a student is Applied Mathematics, specializing in General Relativity.



Abstract

We discuss the modeling of the spherically symmetric complex configurations evolving in the quasi-homologous regime. By imposing the quasi-homologous condition, we formulate several models for the dynamical spherical source coupled with anisotropic fluid. The formulation of these solutions results from the scalar quantity emerging from the orthogonal splitting of the Riemann curvature tensor. These mathematical quantities are considerably important for modeling complex cosmological configurations.

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 6th November 2023; Time: 1500-1530

Where: Seminar Hall, Department of Mathematics, University of the Punjab, Lahore

Note: All faculty members and research scholars (MPhil/PhD) are invited to this seminar.

Chairman Message



It is my honor to witness the passion and dedication that our faculty and students bring to studying this beautiful discipline. I encourage our faculty members to create a supportive environment that nurtures and promotes mathematical research. I urge 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. Our collective responsibility is 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