

# Seminar Invitation: Centrality Measures of Rough Fuzzy Directed Networks

Speaker: **Tahira Batool** from Department of Mathematics, University of the Punjab, Lahore

## Speakers' Brief Introduction

Ms. Tahira Batool is a Ph.D. scholar working under the supervision of Associate Prof. Dr. Uzma Ahmad. The field of student research is Pure Mathematics.



## Abstract

In this talk, the notion of centrality measure in rough fuzzy directed networks is introduced and implemented. The different types of centrality measures i.e., in-degree centrality, out-degree centrality, in-closeness centrality, and out-closeness centrality in rough fuzzy directed networks are defined. The several bounds for each centrality measure are characterized. Finally, its application in the process of decision-making to effectively manage water supply systems utilizing centrality measures of rough fuzzy directed networks is illustrated.

## 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.



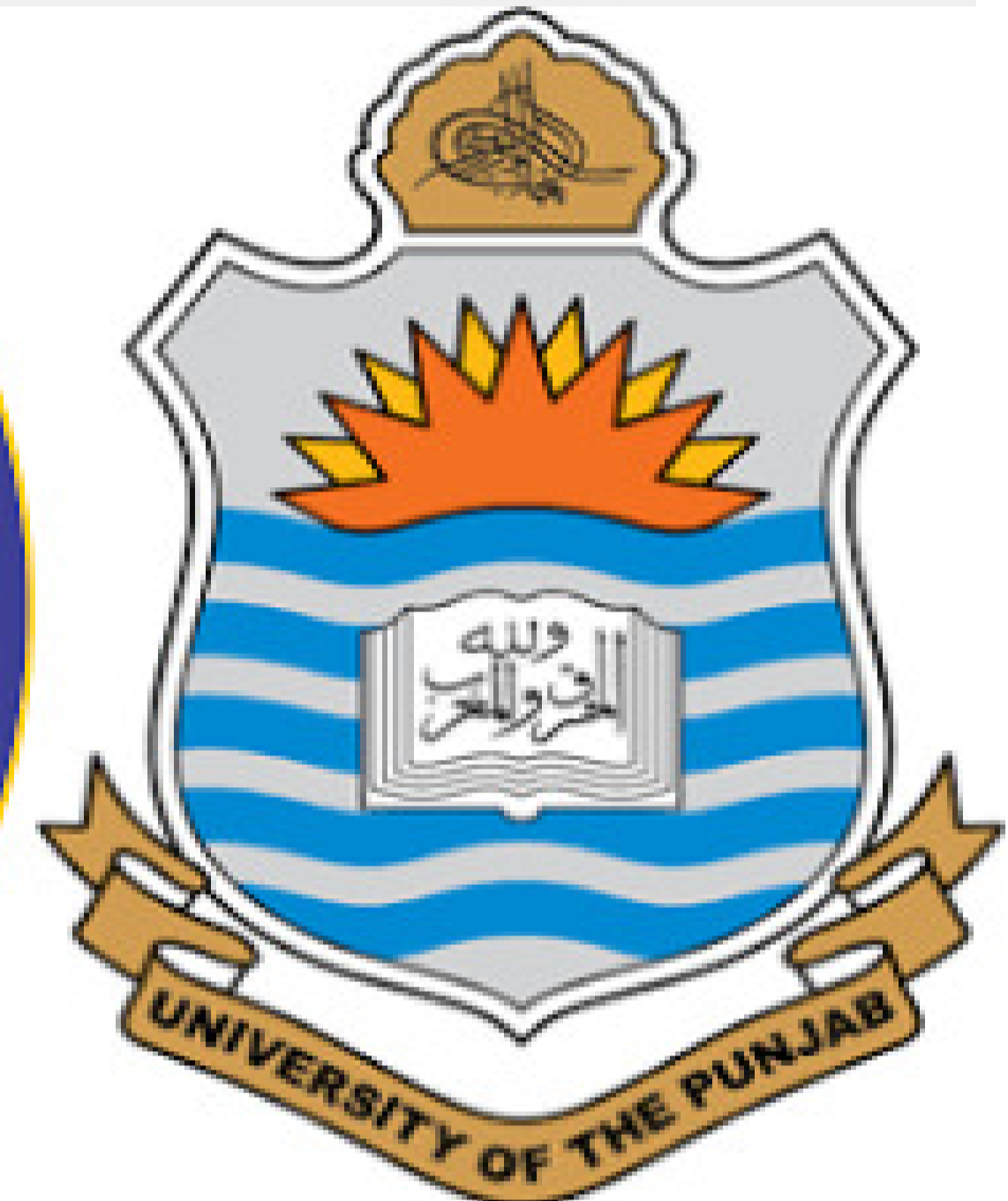
## Please join us for this Presentation

**When:** Wednesday 22nd November 2023; 1500-1530

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

**Note:** All the faculty members and research scholars (MPhil/PhD) are invited to the 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