# Seminar Invitation: Zagreb Energy of Spherical Fuzzy Graph

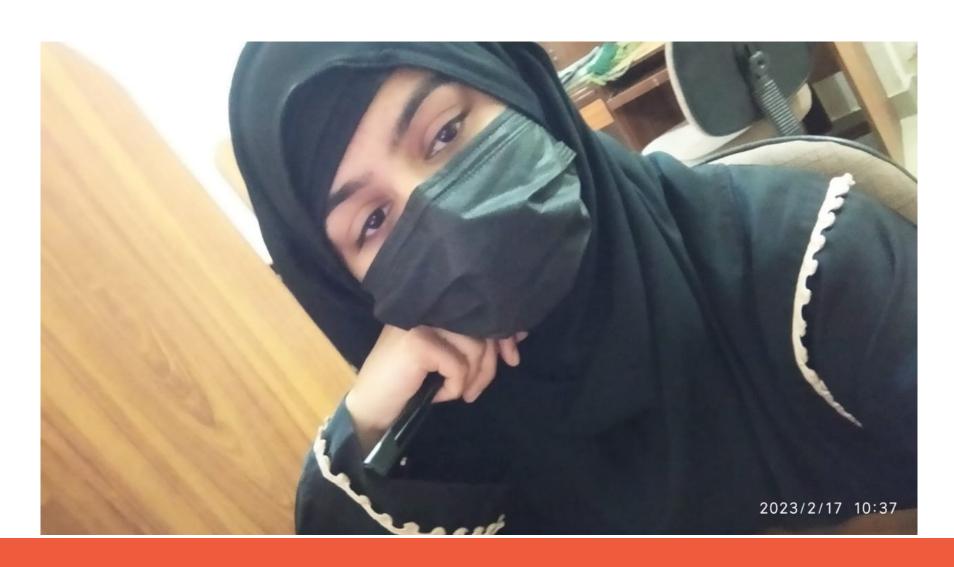
Speaker: Sobia Ikhlaq from Department of Mathematics, University of the Punjab, Lahore

#### Abstract

Based on picture fuzzy sets (PFSs), we use a mathematical model to tackle such types of problems when a person has opinions like Yes, No, Abstain, and Refusal. The spherical fuzzy model is more flexible and practical than the picture fuzzy model as it enhances the space of uncertainty. It broadens the space of vague information evaluated by decisionmakers. Since graphs are the pictorial representation of information. The graph is a tool to represent a network. To handle some real-world problems spherical fuzzy graphs can be used more effectively as compared to PFGs. In this talk, I will extend the notion of fuzzy Zagreb indices of fuzzy graphs to the spherical fuzzy Zagreb indices of the spherical fuzzy graph (SFG). The spherical fuzzy Zagreb matrix of SFG and the Zagreb energy of SFG will be defined with examples. Besides this, I will present some lower and upper bounds of spherical Zagreb energy of SFG.

## Speakers' Brief Introduction

Ms. Sobia Ikhlaq is an MPhil Scholar working under the supervision of Dr. Uzma Ahmad. The field of research of a student is Pure Mathematics, specializing in Fuzzy Graph Theory.



#### 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 fostering interdisciplinary collaborations.



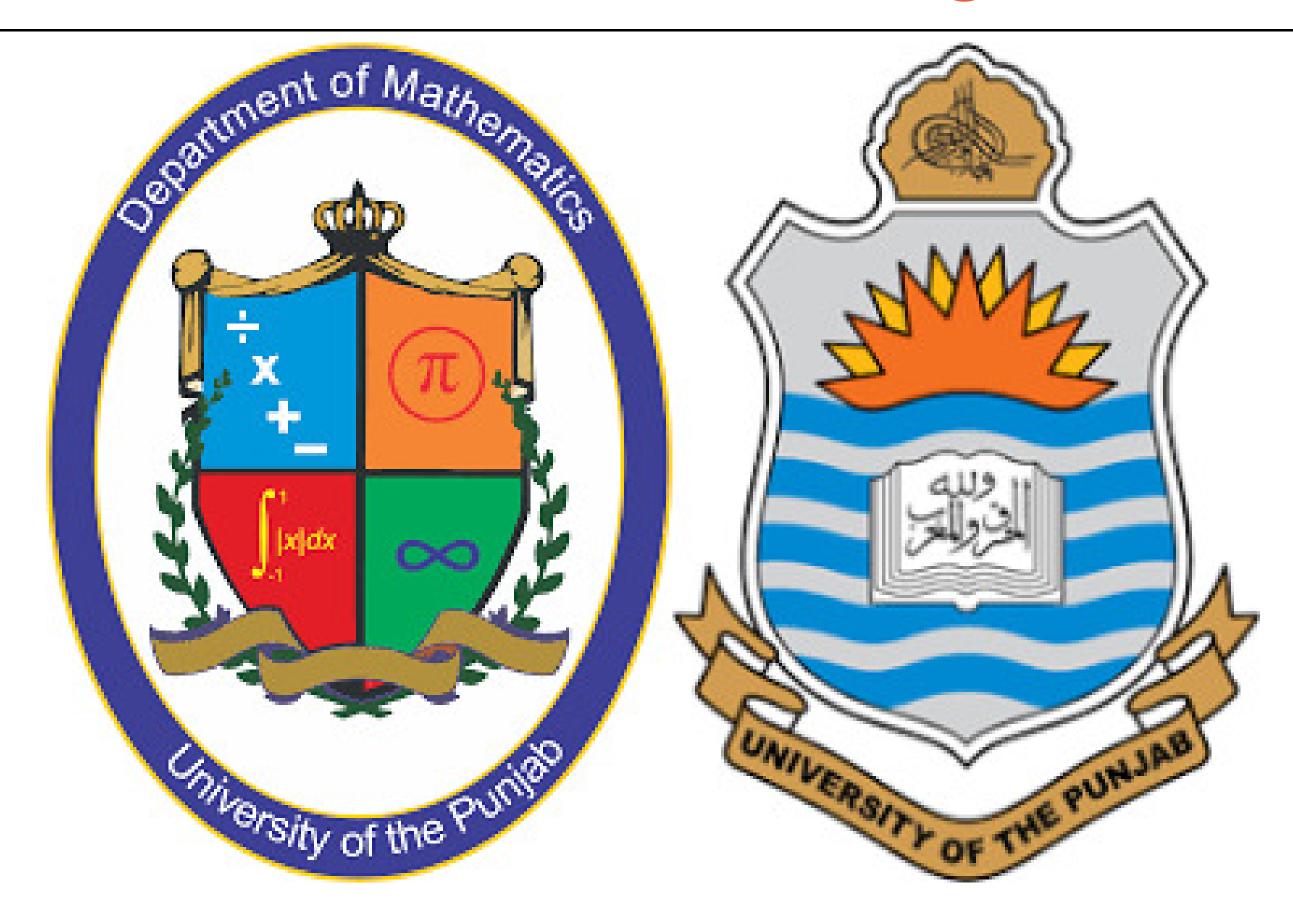
### Please join us for this Presentation

When: Thursday 6th July 2023; 02:30PM-02:45PM

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



