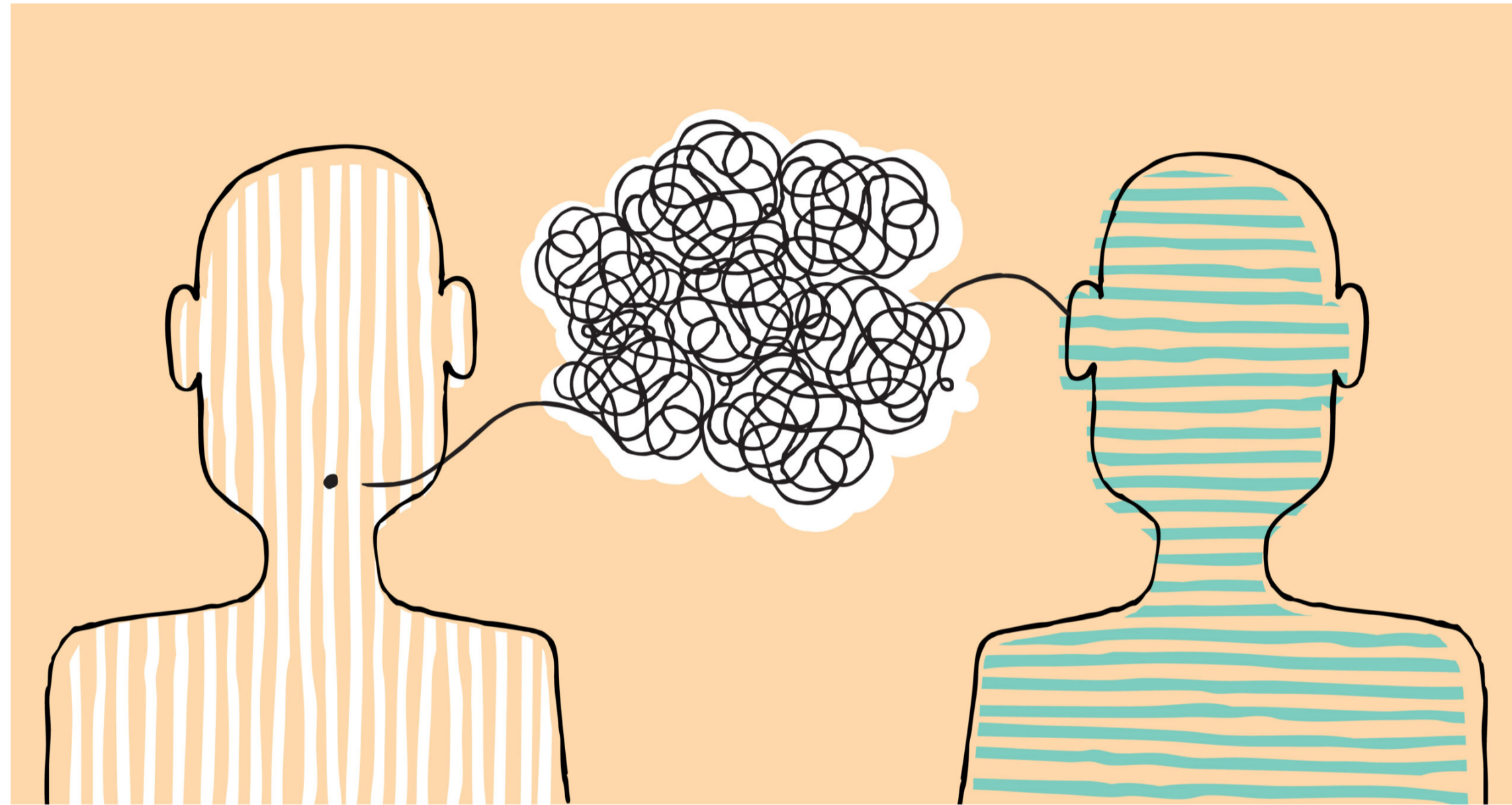


Seminar Invitation: Investigation of blood flow through multiple Stenosed elliptical artery

Speaker: **Sidra Shafique** from Department of Mathematics, University of the Punjab, Lahore

Speakers' Brief Introduction

Ms. Sidra Shafique is an MPhil Scholar working under the supervision of Dr. Aziz Ullah Awan. The field of research of a student is Applied Mathematics, specializing in Fluid Mechanics.



Abstract

With the assistance of the Prandtl fluid model, the present investigation proposes an analytical strategy for monitoring blood flow through a stenosed artery. The artery is depicted as a tube that has a cross-sectional view of an ellipse form. The flow-regulating equations are derived in the dimensionless form under the assumption of mild stenosis. The solution of mathematical equations is obtained by employing the perturbation technique via polynomial of degree four. It is analyzed graphically how different flow-related parameters such as artery length, stenosis height, fluid parameters, and K influence the velocity distribution, wall shear stress, and flow resistance.

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: Friday 7th July 2023; 03:00PM- 03:15PM

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