

Prof. Maryam Mirzakhani Memorial Lecture

GRAPH THEORY AND NEUROSCIENCE

Prof. M. Ram Murty



Abstract

In the last two decades, graph theory has found new applications in the modeling of neural networks of the brain. We will give a short survey of this exciting development as well as report on recent joint work with neuroscientist A.N. Prasad on detecting "hubs" in these networks. We will not assume any knowledge of either graph theory or neuroscience so that the talk is accessible to a wide audience.

About the Speaker



Prof. Ram Murty is a renowned mathematician in number theory working at Queen's University. Currently, he is an A. V. Douglas Distinguished University Professor and holds the Queen's Research Chair.

He received his Ph.D. from MIT in 1980. He is an expert in different branches of number theory: modular forms, elliptic curves, and sieve theory - to name a few. He has authored various books in the area of number theory. He has also successfully guided many Ph.D. students, spanning many generations.

Apart from mathematics, he is also interested in philosophy and is an expert in Indian philosophy. He is the author of the book, "Indian philosophy, an introduction" and has recently taught a course titled "How the mind works (according to Indian philosophy)".

Prof. Murty was bestowed with many awards and recognitions for his contributions to mathematics, some of them being the Coxeter-James Prize, Ferran Sunyer Balaguer Prize, Jeffery-Williams Prize. He was elected as a Fellow of the Royal Society of Canada, E.W.R. Steacie Fellow, a Fellow of the Fields Institute, a Fellow of INSA, and a Fellow of AMS, and was conferred with several other distinctions and honours.

Time and Venue

SCHOOL OF
MATHEMATICS & STATISTICS
UNIVERSITY OF HYDERABAD

Venue - Seminar Hall - I

Date - 30th January 2023

Time - 4:00 PM IST

Online Link

meet.google.com/
kff-uosf-ybs

QR code



All are welcome