# **About the University**

University of Hyderabad was established in 1974 in the heart of the city, Hyderabad, with it's green lush campus spanning over 2,300 acres is one of the most sought after place for higher studies in India. The campus is rich in flora and fauna, home to over 734 flower plants, ten species of mammals, fifteen species of reptiles, and 220 species of birds. It has more than 5,000 students and 400 faculty. from several disciplines. Ranked 4th for the best institution in India in NIRF rankings 2019. with highest NAAC score A\*\*\*\* and worldclass lab facilities, it's one of the leading institutes in India with an astonishing research output. Recently it is recognized as an 'Institute of Eminence' by University Grants Commission (UGC) in 2019.

School of Physics (SOP) is a center of excellence for multidisciplinary and interfacial research, teaching in diverse fields ranging from nano science and cold atoms to astrophysics and cosmology, photonics, quantum field theory, spintronics and particle physics to complex systems. The school offers Integrated M.Sc (5 years), M.Sc (Physics), M.Tech (IC Technology), M.Tech (Microelectronics & VLSI Design) and Ph.D. (physics) and PhD (Electronic Science and Engineering) programmes. School of physics is a UGC-Network Resource Center with aim to network with other institutions, especially undergraduate and post-graduate colleges and universities in the region, and thereby contribute to the improvement in Physics education and research. School of physics under its umbrella has different academic centers such as CAS-EST, ACRHEM, CEOAS.

# **Organizing Committee**

Prof. Ashok Chatterjee

Prof. Bindu A Bambah

**Prof. Nirmal K Viswanathan** 

Prof. P Anantha Lakshmi

Dr. Ashok S Vudayagiri, Convenor

Dr. G Vaitheeswaran

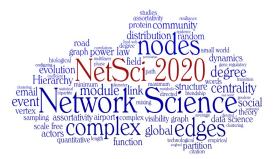
Dr. P Manimaran, Convenor

Dr. Bhawna Gomber

Dr. Abhiram Soori

# National Workshop on Network Science (NetSci 2020)

13-15 March, 2020



### **ORGANIZED BY**

SCHOOL OF PHYSICS
UNIVERSITY OF HYDERABAD



## **Address for correspondence**

#### Dr. P Manimaran

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### **Aims**

Network science is an interdisciplinary field of research in which the physicists are also interested in understanding the biological, technological and social networks using techniques of statistical physics and non-linear dynamics. The area has grown at an exponential rate in the last two decades opening up exciting avenues. The NeSci2020 workshop aims to bring together researchers working in this exciting domain and those who are intending to work in this area. This workshop provide lectures and hands-on training with various statistical and computational tools that can be used to perform network analysis.

### **Date and Venue**

Date: 13-15 March 2020 (Friday-Sunday)

Time: 9:00 AM to 5:30 PM (Friday-Saturday)

9:30 AM to 1:00 PM (Sunday)

**Venue:** NRC Seminar Hall, School of Physics, University of Hyderabad, Gachibowli, Hyderabad.

## Scope

The workshop will include topics such as:

Introduction to graph theory & complex networks
Models of complex networks
Centrality measure concepts
Community structure algorithms
Statististical mechanics of networks
Chaos in complex networks
Biological network analysis
Social network analysis
NetworkX using python
Cytoscape packages etc.

# Resource persons\*

Bagler, G, IIIT-Delhi, New Delhi

Chakraborty, T, IIIT-Delhi, New Delhi

Gupte, NM, IIT Madras

Manimaran, P, UoH, Hyderabad

Panigrahi, PK, IISER Kolkata

Rao, SB, CR Rao AIMSCS, Hyderabad

Santhanam, MS, IISER Pune

Sanyal, S, UoH, Hyderabad

Sinha, S, IMSc, Chennai

Vudayagiri, SA, UoH, Hyderabad

### Who can apply

Academicians, Industry Professionals and Research Scholars who are interested to learn methods and techniques related to Network Analysis using statistical and computational tools may apply.

Pre-requisite: Applicants must have Master's Degree in Physics / Mathematics / Bioinformatics / Computer Science or Bachelor's Degree in Engineering / Technology in relevant areas, or equivalent.

## **Important details**

### **Registration Fees**

Research students : Rs. 3000 /-Faculty members : Rs. 5000 /-Industry Professionals: Rs. 10000 /-

#### **Important Dates**

Receiving application forms : 20 Feb 2020 Intimation of selected applicants : 21 Feb 2020 Payment of registration fees : 10 March 2020

#### How to apply

Stage 1: Interested participants may email a one page note on why he/she wants to attend the programme along with the filled application form that can be downloaded from <a href="https://netsci2020.in">https://netsci2020.in</a> on or before 20 February 2020.

Stage 2: Selected applicants will be informed by email, and those selected should register for the programme by paying the Registration fees through Electronic Fund Transfer by 10 March 2020. Details will be provided to the selected participants by email.

#### **SPONSORS INCLUDE**

Department of Science and Technology, Gol

UGC-SAP CAS Phase II & UGC-NRC, School of Physics, UoH

<sup>\*</sup> tentative list in alphabetical order