INDIAN ACADEMY OF SCIENCES
Bengaluru

Science Education Panel Symposium

6 July 2023: 14.00 to 17.30 h
Venue: Auditorium, Indian Academy of Sciences, Raman Research Institute Campus, Bengaluru

14.00 - 15.00

Prof. Annapurni Subramaniam
Director & Senior Professor,
Indian Institute of Astrophysics, Bengaluru

Astronomy from ground and space

Astronomical studies in pursuit of understanding our universe are being carried out using ground-based as well as space-based experiments. India has several ground observatories and a few space missions that contributed to the multi-wavelength studies of various astrophysical phenomena in the past. India's first space observatory, AstroSat, has got significant attention internationally with its wide-ranging scientific output. In this talk, the current and future landscape of astronomy in India and internationally will be summarized.

The topical areas and science questions that are being prioritised internationally for the next decade will also be discussed.

15.15 - 16.15

Prof. K. N. Raghavan
The Institute of Mathematical Sciences,
CIT Campus, Taramani

Some recent advances in combinatorics

In the last decade and a half, there has been a spectacular advance in our understanding of some long-standing, albeit easily posed, combinatorial questions, most notably due to June Huh, who was awarded the Fields Medal in 2022. In this talk one or two of these questions and their solutions will be discussed.

16.15 - 17.15

Prof. Jayant Haritsa
Indian Institute of Science, Bengaluru

Data science: The good, the bad & the ugly

Data Science has become the buzzword of choice in recent times, especially in the software industry. The accompanying hoopla has spawned frenetic claims foretelling the development of great and wondrous solutions to all kinds of contemporary local and global challenges. In this talk, a more nuanced and balanced view of the area will be provided. Specifically, the case will be made that data science is certainly a potent force-multiplier for solving challenging problems, but is equally subject to methodological abuse, leading to grossly erroneous conclusions. Worse, such misuse could also be deliberate to suit preconceived outcomes and biases, concealed under a scientific veneer. In a nutshell, the view that data science should be a tool of last resort, not first, and leveraged as a support, not substitute, for domain expertise will be advocated.

Moderator: Prof. P K Das, Chair-SEP

Coffee/Tea Break   15.00 -15.15