



PUNE KNOWLEDGE CLUSTER AND INDIAN ACADEMY OF SCIENCES PRESENT
INDIA S&T @ 75 LECTURE SERIES

EVOLUTION, ENERGETICS AND ENVIRONMENT OF ENERGETIC EXPLOSIONS

Massive stars live short but exotic lives and their evolution is greatly affected by magnetism, rotation, and surroundings. It is very important to understand these rare massive stars as they are the only factories in our universe which synthesise heavier the elements required for our existence.

An even more exotic aspect of these massive stars is their end, which invariably results in the biggest explosions in the universe. Since these explosions represent physics involving highly relativistic particles, strong gravity, large magnetic fields and high energetics, they are the best astrophysical laboratories to probe physics at its extreme. However, mapping between a massive star and its explosive end as a cosmic firework is poorly understood. We are using various state-of-the-art telescopes to understand the complex yet exotic life story of massive stars and their death which is throwing new light towards the mysteries of our universe.



About the Speaker

PROF. POONAM CHANDRA

FASc,

National Radio Astronomy Observatory, USA &

National Centre for Radio Astrophysics, Tata Institute of Fundamental Research, India.

Dr Poonam Chandra is an Astrophysicist and a Fellow of the Academy of Sciences (FASc). Her research focuses on the end stages of massive stars exploding as supernovae and gamma rays bursts. Dr. Chandra completed her Ph.D. at TIFR under the Joint Astronomy Program of IISc in 2005. She was awarded the INSA Young scientist award for her Ph.D. work. She was also a Jansky Postdoctoral Fellow at the National Radio Astronomy Observatory, University of Virginia, and then worked as a Senior Research Associate and Adjunct Assistant Professor at the Royal Military College of Canada. Dr. Chandra is a recipient of the Swarna Jayanti fellowship.

SATURDAY | 9TH JULY 2022 | 11:00 AM

LIVE STREAM ON  **zoom**

INDIA
SCIENCE & TECHNOLOGY



As a part of the "India S&T@75" events during the countdown to the 75th year of India's independence, the Pune Knowledge Cluster will be organising a number of lectures on scientific topics. These lectures will be delivered by Fellows and Associates of the Indian Academy of Sciences, who are based in Pune, and will be organised in association with the Academy. The lectures will cover a wide variety of topics, ranging from cutting edge science and technology to developments in these areas in the country over the 75 years since independence.