



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

Title: Evolution, Energetics, and Environment of Energetic Explosions

Organized By	Pune Knowledge Cluster (PKC)
Date	9 th July 2022
Time	11:00 AM - 12: 00 PM
	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 synthesize the heavier elements required for our existence.
Abstract	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 toward the mysteries of our universe.
Open to all	It's public talk. Open to all
Potential Gains	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.
Speaker	Prof. Poonam Chandra (FASc, Associate Professor, National Centre for Radio Astrophysics (NCRA), Tata Institute of Fundamental Research (TIFR), and Fellow, Indian Academy of Sciences)





Profiles of Speaker

Brief information about the speaker



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 explosing as supernovae and gamma rays burst. 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.

About the Organizer



The Pune Knowledge Cluster (PKC) has been established by the Office of the Principal Scientific Adviser to the Government of India. It aims is to bring together academia, R&D institutions, and the industry of Pune and its surrounding areas, to address the challenging problems of the region through innovative means, using scientific knowledge and engaging highly skilled human resources.

PKC is administered by the Inter-University Centre for Astronomy and Astrophysics (IUCAA). In the initial phase, PKC would focus on Health, Sustainability and Environment, Sustainable Mobility, BIG Data and AI and Capacity Building

For more information, visit: https://www.pkc.org.in/