



**S N BOSE NATIONAL CENTRE
FOR BASIC SCIENCES**

Block JD, Sector III, Salt Lake, Kolkata 700 106

DEPARTMENTAL SEMINAR *Astrophysics and Cosmology*

30th September'2021

3.30 PM

ONLINE

SPEAKER

Dr. Tapas Baug, Assistant Professor, SNBNCBS

TITLE OF THE TALK

**Formation of massive stars: Observational signatures of
newly evolved theories**

ABSTRACT

In spite of their vast importance in the evolution of their host galaxies, the formation and evolution of massive stars are not yet well understood. They influence the galactic evolution and replenish the interstellar medium by their strong stellar winds, outflows, expanding HII regions and supernova explosions. Energetic from massive stars may also initiate the second generation of star formation.

In addition to several other theories, two theories have gained considerable observational evidence in the past few years. One of them is accretion through filaments, and another one is a collision between two nearby molecular clouds. We identified these two mechanisms in operation to form the massive stars in several Galactic star-forming regions. In this talk, I shall present the analysis of multi-wavelength data (optical to radio wavelengths) to understand the ongoing physical processes for two massive star-forming regions.

HOST FACULTY

Dr. Ramkrishna Das

Associate Professor & Seminar Coordinator, Astrophysics & Cosmology
