



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

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

## **DEPARTMENTAL SEMINAR** **Astrophysics and Cosmology**

**11<sup>th</sup> November'2021**

**4.00 PM**

**ONLINE**

### **SPEAKER**

**Mr. Anuvab Banerjee, RA -I, SNBNCBS**

### **TITLE OF THE TALK**

**High energy emission from Active Galactic Nuclei**

### **ABSTRACT**

Active Galactic Nuclei (AGN) are the luminous centers of galaxies that are believed to be powered by the accretion of matter onto supermassive black holes. Bipolar outflows or jets that are launched from the accretion-disk black hole systems carry away angular momentum and impact the surrounding matter both inside and outside the host galaxies.

In this presentation, I would attempt to provide a broad overview of the characteristic observational features of AGN, as well as the distinguishing attributes of the different classes of AGN based on the spectral energy distribution features and emission characteristics in different wavebands. Subsequently, I would highlight some of the findings from the multi-waveband spectro-temporal analysis (using Swift XRT/UVOT and FERMI LAT data) on TXS 1700+685 that we are undertaking, which belongs to the Blazar class (a relativistic jet of hot ionized matter directed towards the observer). I would also mention some possible implications and future directions regarding broadband SED modeling using leptonic emission mechanisms.

### **HOST FACULTY**

**Dr. Ramkrishna Das**

**Associate Professor & Seminar Coordinator, Astrophysics & Cosmology**

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