## National Institute of Technology Rourkela

## Departmental Seminar

Seminar Title : tudy of integrated UV light from the Galactic globular clusters (GCs) using UVIT/Astrosat observation

Speaker : Prof A C Pradhan
Supervisor : Prof Bharat Kumar
Venue : Committe Room

Date and Time : 15 Feb 2024 (11:00 AM)

Abstract : Globular clusters (GCs) consist of old stellar populations and the major contribution of ultraviolet (UV) radiation in GCs

comes from the old evolved stars such as BHBs and EHBs. The UV flux distribution in GCs is useful in tracing back their formation history. The integrated UV flux of GCs plays a crucial role in understanding the UV upturn phenomena in the quiescent galaxies. We have studied UV flux distribution of 18 Galactic GCs using AstroSat/UVIT observations. We have compared and analyzed the integrated UV fluxes within the core, half-light, and tidal radii of the selected GCs. We have discussed the fractional contribution to the UV fluxes from various hot-evolved stellar populations present in each of the above regions. Finally, we study the global parameters of the selected GCs using their integrated UV and UV-optical

colors.