



OPEN TALK ANNOUNCEMENT

19 August 2016

2:00 p.m

Boson

Speaker:

Dr. Ritabrata Sarkar

(VASP short term visitor to Prof. Sandip Chakrabarti)

Affiliation:

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Title:

Low cost space exploration with weather balloon borne X-ray detectors

Abstract:

The space exploration so far has been in the grasp of some handful of major industrial bodies or government agencies as they need a huge budget, manpower and realisation time. The detectors for X-ray astronomy needs to be taken above the atmospheric obstruction to be able to see the outer space in this frequency domain, which are usually done by using huge balloons or satellite platforms.

But in ICSP, Kolkata, we developed a technique for low cost X-ray astronomy by designing very light weight yet sophisticated, modular and reusable payloads (mainly featuring X-ray detectors), exploiting the modern technological advancements. These payloads can be carried off at the top of the atmosphere using small weather balloons.

During the last decade we have accomplished about 95 missions to measure the extraterrestrial and secondary radiation in the atmosphere due to cosmic rays. Here I will briefly discuss about this experiment and some of the major results obtained in this endeavour.
