



Contribution ID: 201

Type: **Talk**

## Large Area X-ray Proportional Counter (LAXPC) instrument onboard ASTROSAT

*Tuesday, 8 December 2015 14:43 (23 minutes)*

ASTROSAT is India's first science satellite dedicated to multiwavelength astronomy. It has five science payloads which will cover UV to hard X-ray in low earth orbit. LAXPC instrument is one of the major instruments (415 kg payload weight and above 100 electronic cards). This instrument is designed and developed at TIFR and all the three LAXPC flight units have successfully completed all space qualification tests as well as final calibration and have been handed over to ISRO for integration with satellite during 2014. All science payloads have been integrated with satellite in May 2015 and the integrated satellite tests were completed during June-July 2015 and now it is ready to be launched on 28th September, 2015 from Sriharikota, India.

We have developed GEANT4 simulations of LAXPC detectors and matched with actual calibration data. In orbit, LAXPC will provide largest effective area in the world for next 5-10 years in 3-80 keV energy range. Large effective area, fine time resolution and moderate energy resolution will allow the LAXPC instrument to probe certain properties of X-ray sources with unprecedented detail. I will describe the salient features of the LAXPC along with calibration results as well as some early results from LAXPC instrument.

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**Session Classification:** 20 - Future challenges and experiments