

IGOSat Project

Internship Proposal - Spring 2019

Assembly, Integration and Test for the Qualification Model of the Electrical Power System of IGOSat

Skills, Keywords : aerospace engineering, functional tests, qualification, AIT, scientific instrument

Level Wanted : 4th year, master degree **Duration** : 4 to 6 months **Stipend** : > 500 € / mois

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Project Description :

The Laboratory of Excellence (LabEx) UnivEarthS, set up by laboratories AIM (Astrophysique et Interactions Multi-Echelles), APC (AstroParticule et Cosmologie) and IPGP (Institut de Physique du Globe de Paris) from Paris Diderot University, is carrying carrying transverse projects between those 3 laboratories.

Using the strong involvement of those laboratories in numerous space experiments and instrumentation, an educational nanosatellite project has begun in 2013, with the financial and technical support from CNES (Centre National d'Etudes Spatiales) and the Space Campus of Paris Diderot University.

More specifically, the project is to develop a scientific 3U CubeSat, and launch it in 2019. The satellite will carry 2 payloads, one to study the Ionosphere and one to study the radiation belt.

Internship Description:

The purpose of the internship is to prepare and realize the assembly and testing of the Qualification model of the Electrical Power System of the satellite. The EPS is made out of 4 solar panels, linked to an alimentation board and a battery board. A system of heaters is included on the batteries, and several thermal probes are distributed within the system.

Within a team of students, engineers and scientists, the student need to be able to work autonomously as well as part of a team, have a sense of rigor especially in writing presentation, and already a global vision of information transmission.

This internship is a good opportunity to address numerous points of space engineering.

Website: <http://www.igosat.fr>