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 $CSUM-M-HR-PROP_\ Preparation_of_Structural_and_Thermal_Model_of_a_6U$

Cubesat_for_Test_2021-12-15.docx

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INTERNSHIP OFFER

Title: Preparation of Structural and Thermal Model of a 6U CubeSat for Test

1 UNIVERSITY SPACE CENTER OF MONTPELLIER

The University Space Center of Montpellier (CSUM) is the French leader in the development and operation of nanosatellites developed by students. It has acquired in-depth competences in the field of design, manufacturing, testing and operation of nanosatellites and their subsystems, as well as in the area of space project management and product assurance in the framework of university space projects. The CSUM has an AIT (Assembly Integration and Test) Facility, a CDF (Concurrent Design Facility) and both UHF and S-band Ground Stations. The CSUM develops its own 1U and 3U CubeSat nanosatellite platforms with the support of the Van Allen Foundation and both the French and the European space agencies.

2 INTERNSHIP DESCRIPTION

Context:

Project "Plateformes Nanosatellites ROBUSTA 6U/12U" aims to develop and test an STM of a 6U and 12U CubeSat platform. A structural and thermal model of a 6U and 12U is being designed for an assembly and test in vacuum chamber this summer. The objective of the mission is to finish the preliminary design and prepare the STM of the platform for assembly and Test, to validate the design.

Description of the tasks:

- Get familiar with CAD Model of 6U Platform
- Contribute to the preliminary design of the platform
- Mechanical parts Design, and drawings
- Design of test bench



Figure 1: CSUM 6U CubeSat.

Skills/Languages:

- 1 st / 2nd year of Master of Science (MSc) or equivalent in Mechanical or Aerospace Engineering.
- Proficient ideally using SolidWorks, (other CAD software packages such as CATIA, NX, CREO etc. will also be considered).
- Experience with mechanical design, in the space industry desirable.

Level: Bac+4 - Bac+5

Location: University of Montpellier - University Space Center - 950 rue St Priest 34090 MONTPELLIER

Preferred starting date: Q1 2022

Duration: 5-6 months

Supervisor, Function at CSUM: LONDONO Juan Sebastian – Mechanical and Thermal ENGINEER

Stipend: 3.90 euros/worked hours for duration between 308 and 924 hours, 35 hours/week.

3 CONTACT

Please upload your application at: https://csum.umontpellier.fr/en/job-offers-internship/