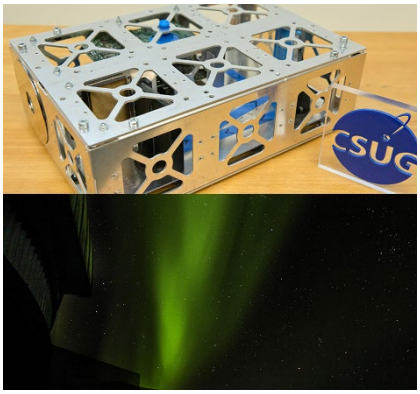
	Project : ATISE **Topic : Mechanical design and realization of the Breadboard and Satellite models** **Years : 2020/2021 – Phase B**

CSUG coordinator:	Thierry SEQUIES Imane EL KHANTOUTI	**Period of work:**	Oct 2021/July 2022

General context:



The University Space Center of Grenoble (CSUG), was inaugurated in September 2015 with the aim to become a key actor for the development of miniaturized and spatialized instrument, in France and in Europe. It trains students of the space field thanks to projects of nanosatellite (<50 kg) and the clustering of research, the education and the industry.

ATISE is one of the project of the CSUG. The mission of this nanosatellite is to measure the aurora's spectrum. The instrumental part is developed by CSUG, and the platform part (communication, energy…) is realized in the CSU in Montpellier.

https://www.csug.fr/menu-principal/projets/projet-atise/projet-atise-auroral-thermosphere-ionosphere-spectrometer-experiment-84543.kjsp?RH=10511530961219480

Objectives :

- To modify the breadboard model of ATISE
- To manufacture the mechanical parts of the breadboard model
- To adapt the current CAD of the payload to the requirements of CSUM

Description of the problematic:

The ATISE payload have a first breadboard model that is to be adapted to fit into a 6U configuration. Based upon updated optical parameters for the positioning of the different existing elements (mirrors, lenses, spectrometer, Electronical cards…), it will be required to design and realize a new breadboard model. In the other hand, the satellite version of the current CAD should be adapted to the requirements of CSUM.

Required skills:

- A good proficiency in CAD software such as: SolidWorks, Catia,…
- An interest to the space industry is a plus.