

Unique, exciting Master thesis project ("TFE")! Academic year 2016-2017

Become a member of the new OUFTI-2 student team building ULg's next CubeSat in one year!
We offer several projects, each concerning a specific subsystem of OUFTI-2

OUFTI-2's electrical power supply (EPS): design, implementation, and tests

Introduction

OUFTI-2 is the new ULg CubeSat (1 kg, 1 liter, 1 Watt) that will allow D-STAR amateur-radio ("ham") telecommunications, just as for OUFTI-1. The new nanosatellite and its subsystems will be designed totally from scratch, using the experience gained, and lessons learned, through OUFTI-1.

Your project!

- **You** and the team will conceive the architecture of OUFTI-2.
- **You** will design, built, and test its completely new, robust EPS, which has the delicate task of getting energy from solar panels, storing it, distributing it, and dissipating it when necessary. The new EPS will likely feature a Maximum Power Point Tracker (MPPT) system to maximize efficiency. **You** will ultimately produce a fully functional 10x10 cm EPS electronic card working in perfect harmony with the other subsystems of the satellite.

Benefits for you

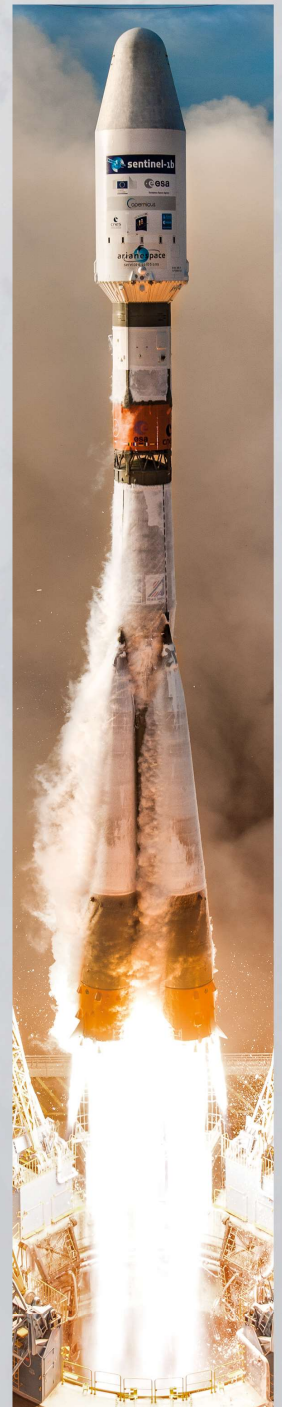
- Work with people who have built, from scratch, a complete ground & space satellite system, with its CubeSat reaching orbit alive!
- Get privileged access to the European Space Agency (ESA) and their training, including at its brand-new learning center in Redu, Belgium.
- Get - if interested, and with our guidance - a ham-radio license (and **your** own call-sign), allowing **you** to use our two ground stations and our mobile transceivers, transmitting up to 550 Watts of radio power!
- Gain international visibility by attending conferences (when warranted).

Your profile

- Electrical/electronics engineering, engineering physics, or equivalent.

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Don't miss this once-in-a-lifetime opportunity!