

# JOIN THE VAN ALLEN FOUNDATION: A VISION, A NETWORK



The Van Allen Foundation had a decisive role in the emergence of the Newspace in France. Today, the duo Van Allen Foundation (FVA) and University Space Center of Montpellier (CSUM) has two priority ambitions. One is focused on combating the climate change, which is illustrated by the Robusta-3A Mediterranean nanosatellite. The data collected during this demonstration mission will be used in a meteorological research program which could help improve the forecast of Cévenols episodes. The other aim, as part of the MUSE I-Site policy, is to collaborate with emerging countries, especially African, eager to acquire spatial skills. This ambitious project is based on innovative training from the UM, showcases of CSUM expertise and set up with FVA industrial partners.



Together we must achieve these ambitions; like us, support the Van Allen Foundation.

**Jean-Claude GAYSSOT**, President of the Van Allen Foundation  
Former Minister, President of the Port of Sète-Frontignan



## Founder members



**University of Montpellier**,  
6th largest university in France



**3D PLUS**,  
World leader in 3D electronic  
components for the space industry



**AIRBUS Defence & Space**,  
2nd in the world in the space sector



**EXPLEO**,  
international reference group in engineering,  
quality and digital solutions, innovation  
partner in space sector



**LATECOÈRE Interconnection Systems  
Division**,  
world-class leader in interconnection  
systems for aeronautics and space

## Qualified members



**Philippe ADELL**  
Radiation expert,  
Jet Propulsion  
Laboratory, NASA



**Jean-Louis FELLOUS**  
Former Director  
COSPAR



**Philippe LATTES**  
Delegate  
Space Affairs,  
Aerospace Valley



**Martin GIARD**  
Scientist Delegate  
Space Affairs  
CNRS, INSU



**François ROCARIES**  
Scientist Director  
F'SATI



**Frédéric TESTON**  
Director  
Systems Dpt  
ESA/ESTEC



**Michel TOGNINI**  
French Astronaut,  
Former Director  
of ESA astronauts  
center

## Ambassadors



**Bernard BIGOT**  
CEO of ITER



**Anne BONDIOU-CLERGERIE**  
Director of  
R&D affairs,  
Space and  
Environment,  
of GIFAS



**Christophe CARNIEL**  
CEO of VoGo



**Jean-Paul HERTEMAN**  
Former CEO of  
Safran Group



**Daniel KUNTH**  
Director of  
CNRS Research,  
Astrophysicist



**Hubert REEVES**  
Astrophysicist

## JOIN US AND DEDUCT YOUR DONATION FROM YOUR TAXES!



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### Make a donation:

join the adventure  
- private and corporate -  
→ from 1€

### Become Friends of the Foundation:

the local support  
- private and corporate -  
→ from 1.000€/year

### Join the Partners Club:

the choice of network  
- corporate -  
→ from 5000€/year  
over 3 years -  
\*depending on the  
corporate turnover

### Become a Founder Member:

the strategic choice  
- corporate -  
→ contact us

→ **corporate** : 60% of your donation deductible from your business tax (up to 0.5% of turnover excluding VAT)  
→ **private** : 66% of your donation deductible from your income tax  
→ **private with the isf wealth tax** : 75% of your donation deductible from the wealth tax



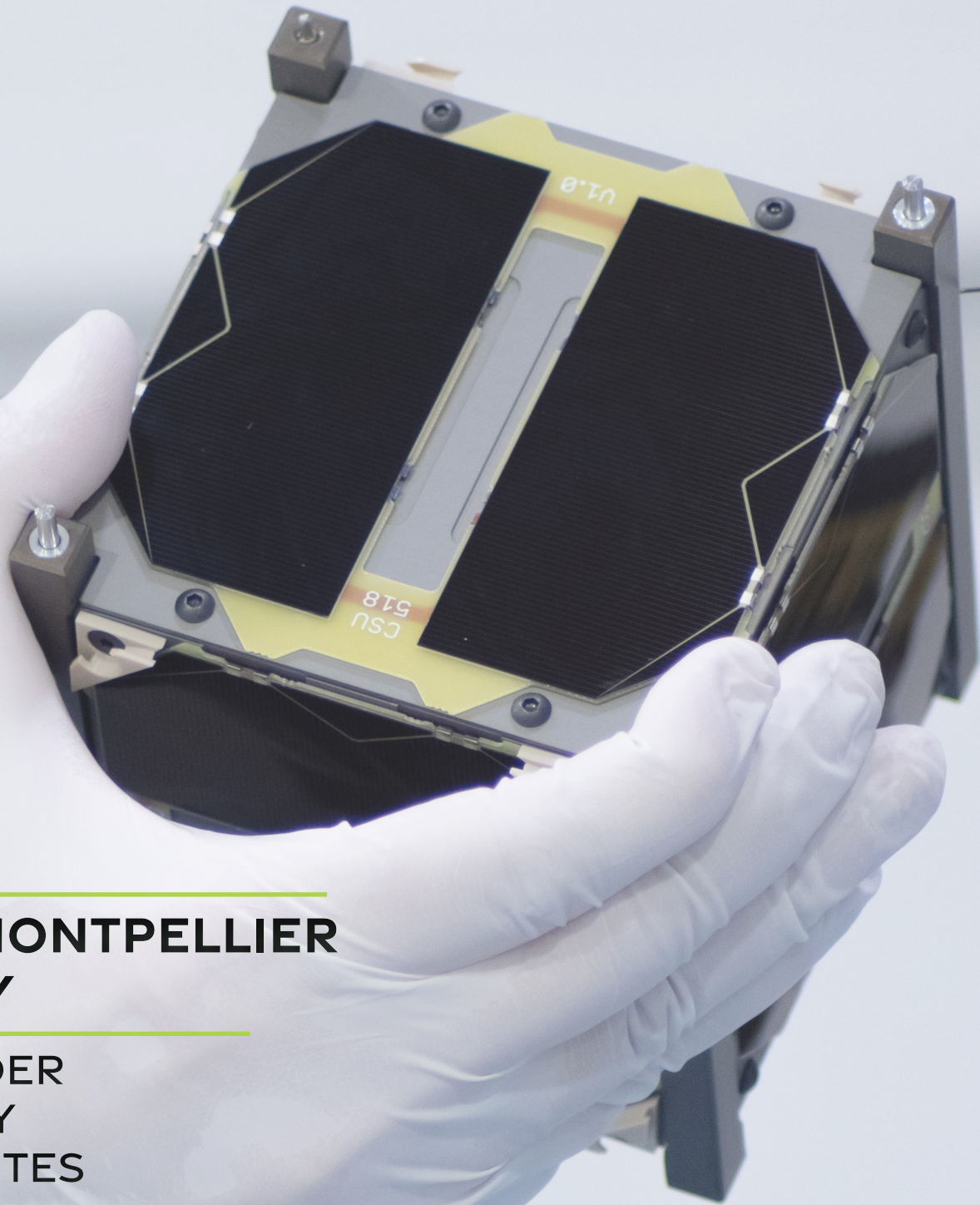




FONDATION

# VANALLEN

UNIVERSITÉ DE MONTPELLIER



## SUPPORT MONTPELLIER UNIVERSITY

FRENCH LEADER  
IN UNIVERSITY  
NANOSATELLITES

INNOVATION | EDUCATION | NETWORK



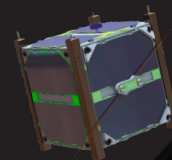


# A HISTORY, A DUO

The University of Montpellier initiated the development of the nano-satellite sector in France in 2006 by :

→ creating the first french University Space Center, the **CSUM**, where students develop from A to Z nanosatellites, supervised by academics with industry cooperation.

→ setting up the **Van Allen Foundation (FVA)**, which offers strategic and financial support. The goal is to raise new funds, especially through corporate donations, in order to continue the adventure.



## 2006

**1<sup>st</sup> 1U**  
ROBUSTA Nanosatellite (2006-12), in the frame of the CNES EXPRESSO call for project  
Funded by CNES



## 2011

**1<sup>st</sup> french CSU**  
Creation of the University Space Center of Montpellier

## 2012

**Launch of ROBUSTA** on VEGA.  
**1<sup>er</sup> french nanosatellite** in orbit

**2<sup>ème</sup> 1U**  
ROBUSTA 1B (2012-15)



## 2013

**1<sup>er</sup> 3U**  
Méditerranée Nanosatellite (2013-21)



## 2014

**3<sup>ème</sup> 1U**  
MTCube Nanosatellite (2014-19)



CSUM

FVA

Creation of the Van Allen Foundation



**Funding FVA - CNES**  
1U ROBUSTA 1B

**Funding FVA - CNES**  
3U Méditerranée

**Funding FVA - ESA**  
1U MTCube  
**New founder member**  
Zodiac Data Systems



## TECHNOLOGICAL INNOVATION

Nanosatellites provide a low cost and rapid solution to test new technologies in space for industry and research. They enable data collection for a range of potential applications: humanitarian, environmental...

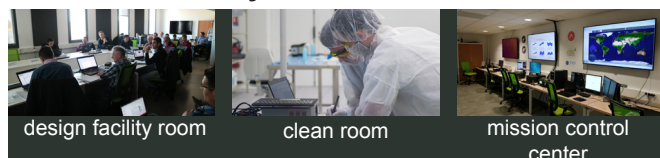
### INNOVATION at the University Space Center

→ 2 nanosatellites lines: CubeSat 1U and 3U  
**Expert grasp of the technology:** nanosatellites developed entirely in-house and launched into orbit

→ International collaboration



→ CSU resources available to industry: resources for testing, construction and satellite-related systems



### STRATEGIC SUPPORT by the Van Allen Foundation

→ Nanosatellite development strategy by the foundation's Board of directors





→ Privileged access for the industrial partners of the university of montpellier research (laboratories, platforms) and training network



→ Support for institutional relationships and international partnerships

→ Promotion of the nanosatellite sector



2015	2016	2017	2018	2019
<b>4<sup>ème</sup> 1U</b> CELESTA Nanosatellite (2015-20). Funded by CERN  <b>Space Care</b> UM, member of the Collective for Space Care of CNES (loi LOS)  	<b>1<sup>st</sup> French "CSU" building</b> Supported by the Occitanie Regional Council, housing: CSUM, FVA, Latécoère, Systheia, Tecnalia, TRAD, and SATT AxLR  <b>New UM education program:</b> Master in space systems Engineering	<b>Launch of ROBUSTA-1B</b> on PSLV. 2 <sup>nd</sup> french nanosatellite in orbit. Still operational early 2020		<b>Launch of MTCube</b> on Soyuz. 3 <sup>rd</sup> UM nanosatellite in orbit  <b>New UM education  program:</b> Professional license Assembly, Integration, and Tests
<b>Creation of the Van  Allen Foundation  Partner's Club</b>  	<b>New founder  member</b> Latécoère, Branche Interconnection Systems  	<b>New founder  member</b> Spherea  	<b>New founder  member</b> Expleo  	<b>Creation of the Friends  of the Van Allen  Foundation</b>  

## PRACTICAL TOP-FLIGHT TRAINING

The CSU welcomes students developing nanosatellites in the frame of internships or final projects. Internship grants are funded by the Van Allen Foundation. The students work on every aspects of space missions : upstream at the Concurrent Design facility, development, Assembly Integration and Testing, and finally launch and in orbit operations.

### PROJECT-BASED CULTURE at the University Space Center

→ Welcoming students of all levels, all fields,  
all universities and higher schools  
**Bac+1 to Bac+8**  
(in mechanics, electronics, computer science...)



→ Future operational employees at the end of  
their study program

- Developing sought-after skills:  
systems engineering, team projects management
- Working methods and tools used in the profession
- Interactions with space agencies and industry:  
projects, contribution to training courses, participation  
in trade fairs

### FINANCIAL SUPPORT by the Van Allen Foundation

→ Providing funding for study programs  
post-doctoral students, doctoral students, student  
internships, Master, Lpro and DUT programmes

→ International  
sponsoring 3 students at JPL/ NASA for their theses

→ Funding for project technology  
launches, equipment, materials ...

**> 2,5 M€ already invested**  
(or 350.000€ /an)

by the Van allen foundation in training & projects