



SIRIUS
SPACE, BUSINESS
& LAW



PhD student “Diffusion of Innovations and Strategic Marketing in the Context of the Space Economy”

1 Who we are ?

Toulouse Business School (TBS) offers internationally recognized degrees and is part of the prestigious 2% of business schools with the “triple crown” of accreditations: EQUIS, AACSB, and AMBA. TBS ranks among the top business schools in France, and our Master in Management program is among Europe’s top 20 (Financial Times).

Our research teams are focused on the needs of the business world, participating in the national and international arenas of research tendering.

At TBS we have in particular a team that conducts research activities applied to space sector. These works are implemented within the SIRIUS chair (<http://chaire-sirius.eu/en>). SIRIUS is a business chair, based on an original type of public-private partnership between three leading operators in the global space sector (CNES, Airbus Defence and Space and Thales Alenia Space) and two respected higher education institutions: the Toulouse 1 Capitol University and Toulouse Business School.

The SIRIUS team focuses particularly on the economic and managerial issues confronting space activities and, especially, those raised by the generalization of the use of satellites and the multiplication of space applications.

2 Context of the PhD

The PhD student will be involved in the TREASURE Project (TREASURE: Training, REsearch and Applications network to Support the Ultimate Real time high accuracy EGNSS solution).

This project is part of an exciting MARIE SKŁODOWSKA-CURIE ACTIONS Innovative Training Network (ITN) funded by the EU Framework Programme for Research and Innovation HORIZON 2020 (Call: H2020-MSCA-ITN-2016).

Purpose of the TREASURE Project

TREASURE (Training, REsearch and Applications network to Support the Ultimate Real time high accuracy EGNSS solution) project will concentrate on research that will pave the way for the development of a service that can ensure high accuracy positioning and navigation. As this high accuracy becomes more easily available it is envisaged that it could become the new norm in mass market applications.

Background of TREASURE

Collectively, GNSS (Global Navigation Satellite Systems) includes systems such as the US Global Positioning System (GPS) and the Russian GLONASS, as well as the new, under development systems like China's Beidou and most importantly Europe's Galileo. Galileo is what we call the European GNSS and is to be fully operational around 2020. The GPS has clearly been the frontrunner of all these systems – controlled by the American military and in full operation since 1995, it has revolutionised positioning and navigation, not only in the military but also in the scientific and commercial circles, where it has dominated the market for two decades now. The introduction of these new systems (GLONASS, Beidou and the European GNSS) opens up an opportunity. The European Union's ambition for European GNSS is to strongly impact European industry and society by incentivizing the various application segments and creating jobs. Therefore it is a priority to secure the development of this technology in Europe. The shortage of specialised human resources in this field, together with the European Commission prediction of an annual global market for GNSS of €300bn by 2020, when Galileo will be fully operational, make this project especially timely and distinctive.

The TREASURE project is:

- inter-disciplinary : Business Strategies, Marketing, Product Development, Electronics, Informatics, Aerospace, Geodesy, Physics, Remote Sensing, Tomography, Prediction/Forecasting,
- inter-sectoral : Academia, Consultancy, Service Providers, System Integrator, Government Research Institutions, Agri-Tech and Offshore industries
- international : France, UK, Italy, Netherlands, Germany, Portugal, with associate partner organisations established as far as in Russia, Brazil, Canada, Hong Kong, Australia and South Korea)

The TREASURE project is made of 5 main Work Packages (WP):

- WP1: Ionospheric models and data assimilation
- WP2: Tropospheric models and real time orbits
- WP3: Ionospheric scintillation and interference mitigation models and tools
- WP4: Real Time PPP and NRTK algorithms
- WP5: Conceptual prototype and **Marketing**

The PhD student will be part of the WP5.

3 What we are looking for?

- You hold a Master's degree in innovation management, in strategy, in marketing, in business administration, in business economics, in business engineering, or a related field. Students in their final year can also apply. The degree requirements need to be fulfilled at the start of your appointment. Candidates must not yet have been awarded a doctoral degree
- You have a strong motivation for in academic research in the fields of innovation, strategy, marketing

- You are strongly interested by research applied to high-technology sectors such as space sector and you like to collaborate with persons with a technical background
- Your excellent academic record underlines your potential to publish in top-ranked journals.
- Your working style is team-oriented and you have strong communication skills
- You are highly proficient in English; additional knowledge in French would be an advantage
- You like to work in an international context and staying some time abroad at another universities
- You not have resided or carried out your main activity (work, studies, etc.) in France for more than 12 months in the three years immediately prior to recruitment (short stays such as holidays are not taken into account).

4 Your tasks

- Investigating diffusion of innovation models
- Analyzing the marketing of high technologies products and services
- Conduct interviews with space managers
- Collect quantitative data and implement advanced statistical analysis

5 What can we offer ?

Starting date:

We offer a full-time employment of fixed term from September 1, 2017 for 3 years.

Locations:

- Main location : Noveltis and Toulouse Business School in Toulouse, France
- Temporary locations :
 - o INGV (Istituto Nazionale di Geofisica e Vulcanologia), IT (Years 1, 2 and 3, 1 month each year)
 - o Geo++, Germany (Year 1 and 3, 1 month each year)
 - o Fugro, The Netherlands (Year 1 and 3, 1 month each year)

Salary:

Salary will be within the range: approximately € 26,000 to € 38,000 per annum (depending on location and family status). The costs related to the stays in the temporary locations will be covered by the TREASURE project.

6 Great opportunities after your doctoral degree

You could undertake a distinguished **career in industry, government, and academia.**

If you are interested in industry and government careers you could apply for a position of **project manager** or **business manager** in companies involved in the business of positioning and navigation or in organizations such as the European GNSS Agency, the European Space

Agency. If you are interested in a career in academia you could apply for a **post-doc** or for a position of **assistant professor**.

7 Interested?

For further information please contact Dr. Victor DOS SANTOS PAULINO by email v.dossantospaulino@tbs-education.fr and visit the websites of the main organizations involved:

- Toulouse Business School: <http://www.tbs-education.fr/en>
- SIRIUS Chair: <http://chaire-sirius.eu/en/space-institute-for-research-on-innovative-uses-of-satellites/>
- Noveltis : <http://www.noveltis.com/en/>
- TREASURE project: http://cordis.europa.eu/project/rcn/205493_en.html

Take the opportunity to join our team by submitting your complete application documents in one pdf file via email, including

- Motivation letter in English (maximum 1 pages) explaining:
 - the motivation for conducting a PhD, and to dedicate to the topic for the next years
 - the applicant's background and expertise, with a focus on the skills, knowledge and aptitude they would bring to the position
- Curriculum Vitae (maximum 2 pages) including:
 - education (indicating the grade point average of the bachelor degree and master degree),
 - courses taken as relevant for the position,
 - specific technical skills,
 - previous work related to the topic (master's thesis, reports and others)
- Bachelor Degree (incl. grades)
- Master Degree (incl. grades)

Applicants who are about to complete their degree are explicitly encouraged to apply.

The first round of applications will be assessed after January 31, 2017

The **final closing date for applications is, May 30, 2017.**