

2 Ph.D. Students (EU MSCA-ITN Early Stage Researcher)

Location: **Perugia, Italy.**

Organization Name: **Department of Engineering, University of Perugia.**

Research field: **Electromagnetic field and microwave components.**

Topic 1: **High performance miniaturized components for aerospace applications.**

Topic 2: **Use of additive manufacturing for microwave components for space applications up to terahertz frequencies**

About University of Perugia

The University of Perugia is one of the oldest Universities in the world. It was founded in 1308 by Pope Clement V. Formal imperial recognition of the University was conveyed in 1355.

Today, research, education and consulting activities in the various disciplines are organized in 16 Departments, with about 23,500 students, 1,100 professors and researchers and 1,000 staff members.

Nowadays, the University of Perugia offers a vast array of degree programs, which cover nearly all fields of study authorized by the national Ministry of Higher Education. Post-graduate degrees are offered in top rated specialization schools and doctoral programs, as well a variety of masters programs in the various academic disciplines.

The European Commission has recently awarded the University the prestigious ECTS label for excellence in the application of the European Credit Transfer System in all of its degree programs – first and second cycles and single cycle – confirming the high quality of our expanded international endeavors.

The University holds a Language Center (CLA) that delivers Italian courses to international students, as well as English, French, German courses. The University holds a Library Services Centre (CSB), operating 13 libraries, the University Centre for Scientific Museums (CAMS), the University Sports Centre (CUS) and the Giuseppe Bambagioni Sports and Recreation Centre.

Detailed Description

Both positions are part of a large Marie Skłodowska-Curie European Training Network (ETN). The TESLA ETN consists of 8 academic and 11 industrial nodes in 8 European countries (UK, France, Germany, Italy, Spain, Austria, Sweden & Finland). It will create a vibrant, multidisciplinary training-through-research environment uniquely equipped to develop the Advanced Technologies for future European Satellite Applications. The TESLA ETN will hire 15 Early Stage Researchers (two of them based in Perugia), who will pursue PhD collaborating with senior staff in academic and industrial sectors to conduct top-notch research into new and enabling technologies for satellite flexible payloads, big constellation systems and Internet of Space, satellite high-speed communications and remote sensing, as well as large satellite platforms.

The appointment is full time (100% FTE) for 36 months with an expected start day of 1st July, 2019 or as mutually agreed upon by both parties. This position will be based in the Department of Engineering of the University of Perugia (<http://www.ing.unipg.it/en/>).

The two post holders of the Horizon2020 TESLA project team that will be based in Perugia, will be tutored by Prof. Cristiano Tomassoni. Prof. Tomassoni is with the Electromagnetic Fields Group of the Department of Engineering. The group is internationally recognized and has a wide experience in modelling and design of passive microwave components.

The two ESRs will be enrolled on PhD programmes in microwave circuits and components at the University of Perugia (UNIPG). The two ESRs research activity will be focused on two different topics:

First ERS will focus on:

-High performance miniaturized components for aerospace applications.

Second ERS will instead focus on:

-Use of additive manufacturing (AM) for microwave components for space applications up to terahertz frequencies

Both roles are based at UNIPG, Perugia, with secondments to project partners in the EU. The ESRs will undertake postgraduate research in support of the agreed doctoral research programme and present and publish research to both academic and non-academic audiences. The successful candidate will also be expected to prepare progress reports for funding bodies, attend and participate in all training events and actively participate in outreach activities.

Essential Criteria

Applicants should have a good undergraduate degree or a postgraduate Master's degree (or equivalent) in electronic or electrical engineering or a physical sciences subject as well as highly proficient English language skills. The ability to think logically, create solutions and make informed decisions is essential as are excellent organisational skills and the ability to travel and work across Europe.

Important eligibility rules for candidates: There are no restrictions on the nationality, but researchers must be early-stage researchers (ESR), i.e. at the time of recruitment, be in the first four years (full-time equivalent research experience) of their research careers and have not been awarded a doctoral degree.

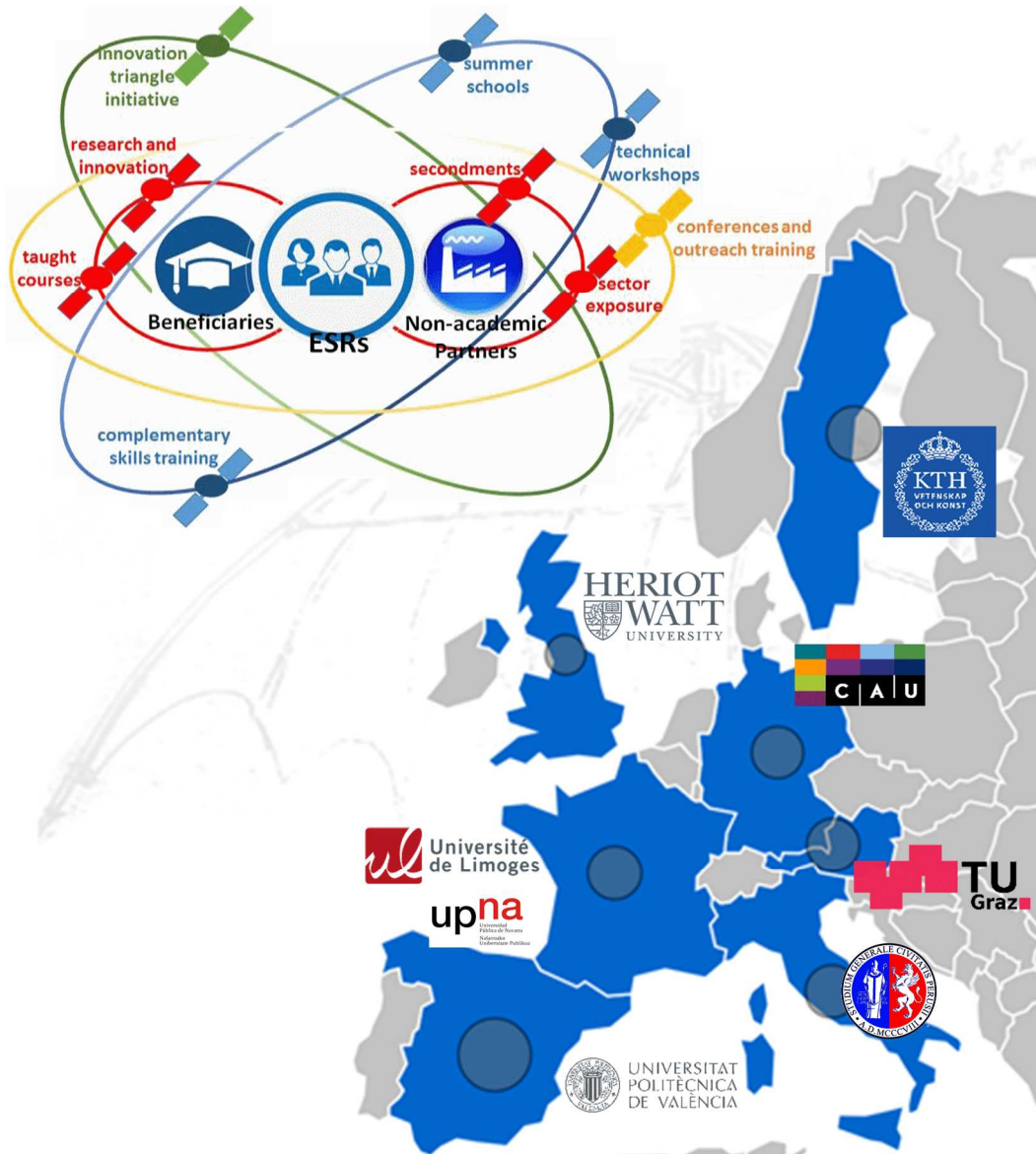
Researchers must comply with the mobility rule - Researchers may not have resided or carried out their main activity (work, studies, etc.) in the country of their host organisation for more than 12 months in the 3 years immediately before the reference date: the recruitment. Compulsory national service and/or short stays such as holidays are not taken into account.

Desirable criteria

- Flexible approach to work and responsibilities
- Energy and enthusiasm for the project
- Experience in RF/microwave engineering
- Research activity and publications on microwave components

TESLA ETN

Marie Skłodowska-Curie European Training Network (ETN)



Partner:

