



GENIUS is a **Marie Skłodowska-Curie Doctoral Network Industrial Doctorates (MSCA-DN-ID)** funded by the European Union's Horizon Europe Programme for research and innovation and by the UK Research and Innovation.

CORDIS page of GENIUS: <https://cordis.europa.eu/project/id/101072560>

GENIUS (Glide-symmetric mEtamaterials for iNnovative radio-frequency commUNication and Sensing) is an Industrial Doctoral Programme led by top European actors of research and innovation in radio-frequency (RF) systems with applications to aerospace communications and automotive sensing proposing novel scientific tools provided by [glide-symmetric \(GS\) artificial materials](#). It has recently been discovered that these metamaterials, characterized by a special symmetry inside their constitutive unit cells, possess marvellous electromagnetic (EM) properties (ultra-wide band propagation, strong isolation and high absorption features) capable to address the open challenges of modern RF systems, motivated by the increasing demand of ubiquitous connectivity, and the growing automation of transports. The multi-disciplinarity and the strong link between material research and industrial applications are an innovative and original core feature of the GENIUS programme will help the researchers to develop a critical thinking in a very wide range of sectors of innovation requiring mastering of novel RF systems and embedded electronics.

To this end, GENIUS will establish a **group of 6 outstanding doctoral candidates (DCs)** who will be the European leaders in this field, through a unique scientific and training programme. The GENIUS consortium involves academic and industrial partners. **Every DC will be enrolled in either a 3-year PhD program (at Sorbonne University or Polytechnic of Turin) or a 4-year PhD program (at KTH). The DC will be recruited by an academic partner (first part of the project) and by an industrial partner (second part of the project, 1.5 years or more).**



Politecnico
di Torino



THALES

AIRBUS



SINOWAVE



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UK Research
and Innovation



Expressions of interest are sought from potential candidates to be part of the GENIUS team!

All candidates must comply with the Marie Skłodowska-Curie Actions eligibility requirements (please see slide 22 on <https://www.horizon-europe.gov.fr/sites/default/files/2022-06/doctoral-networks-2022---rea-pdf-6359.pdf>).

In summary, candidates:

- ✓ Must not yet have been awarded a doctoral degree
- ✓ Must carry out trans-national mobility and not have resided or carried out their main activity (work, studies, etc.) within the host country for more than 12 months in the three years immediately prior to recruitment (short stays such as holidays are not taken into account). The host country is the country of the first recruitment (institution a in the column “Host Institution” in the table below).

Salary will be within the range: approximately € 32,000 to € 55,000 per annum (depending on location and family status). Successful candidates are expected to enroll on a PhD programme at the host institutions (or at the partner Universities if the host institution does not provide the PhD title).

No.	Host Institutions	Location	Main Supervisors	Starting date	Main research topic	To apply
1	a) Sorbonne University (SU), France b) Thales RT (THALES), France	Paris (FR) Palaiseau (FR) 6-month secondment in Stockholm (SE)	Guido VALERIO (SU) Erika VANDELLE (THALES)	Sep.-Oct. 2023	Wide-angle glide-symmetric absorbers for aircraft communications	https://euraxess.ec.europa.eu/jobs/78725
2	a) Royal Institute of Technology (KTH), Sweden b) Thales RT, France	Stockholm (SE) Palaiseau (FR)	Oscar QUEVEDO-TERUEL (KTH) Thi-Quynh-Van HOANG (THALES)	Sep.-Oct. 2023	Lens-like wideband wide-angle glide-symmetric impedance matching	https://euraxess.ec.europa.eu/jobs/97237
3	a) Royal Institute of Technology (KTH), Sweden b) Sinowave, Sweden c) Airbus, United Kingdom	Stockholm (SE) Gothenburg (SE) Stevenage (UK)	Oscar QUEVEDO-TERUEL (KTH) Simon HE (SINOWAVE) Sonya AMOS (AIRBUS)	Sep.-Oct. 2023	Glide symmetry for power distribution network for satellite terminals	https://euraxess.ec.europa.eu/jobs/96577
4	a) Politecnico di Torino (POLITO), Italy b) IMST, Germany	Turin (IT) Kamp-Lintfort (DE)	Francesca VIPIANA (POLITO) Simona BRUNI, Enrico TOLIN (IMST)	November 2023	Glide-symmetric radiating metasurfaces for radar antenna frontend	https://euraxess.ec.europa.eu/jobs/81695
5	a) Sorbonne University (SU), France b) IMST, Germany	Paris (FR) Kamp-Lintfort (DE)	Guido VALERIO (SU) Simona BRUNI, Marta ARIAS (IMST)	Sep.-Oct. 2023	Glide-symmetric metasurfaces for radar RF frontend	https://euraxess.ec.europa.eu/jobs/83301
6	a) Politecnico di Torino (POLITO), Italy b) Sinowave, Sweden	Turin (IT) Gothenburg (SE)	Francesca VIPIANA (POLITO) Simon HE (SINOWAVE)	November 2023	Reconfigurable integrated circuits with glide symmetry for G-band radars	https://euraxess.ec.europa.eu/jobs/81696

Don't miss this opportunity: visit Euraxess and apply!



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