



POLITECNICO
MILANO 1863

HAVING REGARD TO Law no. 168 of 9 May 1989, and in particular Article 6, which establishes the regulatory autonomy of Universities;

HAVING REGARD TO Law no. 537 of 24 December 1993, "Corrective Measures for Public Finance";

HAVING REGARD TO Presidential Decree no. 445 of 28 December 2000 - Consolidated Act on Legislative and Regulatory Provisions on Administrative Documentation and subsequent amendments;

HAVING REGARD TO Legislative Decree no. 196 of 2003, "Personal Data Protection Code", and subsequent amendments;

HAVING REGARD TO EU Regulation no. 679/2016 on the protection of natural persons with regard to the processing of personal data and the free movement of such data;

HAVING REGARD TO Legislative Decree no. 198 of 11 April 2006, "Code of Equal Opportunities between Men and Women, pursuant to Article 6 of Law no. 246 of 28 November 2005", and subsequent amendments;

HAVING REGARD TO Law no. 240 of 30 December 2010, and in particular Article 22-ter;

HAVING REGARD TO Ministerial Decree no. 639 of 2 May 2024, "Determination of Scientific-Disciplinary Groups and Related Descriptions, as well as the Rationalization and Updating of Scientific-Disciplinary Sectors and Their Assignment to Scientific-Disciplinary Groups", and subsequent amendments;

HAVING REGARD TO the Statute of Politecnico di Milano adopted by Rectoral Decree no. 623/AG dated 23/02/2012, published in the Official Gazette on 02/03/2012, no. 52;

HAVING REGARD TO Rectoral Decree no. 41/AG of 17 May 2005, issuing the Regulation concerning the fee for participation in internal competitions reserved to staff and in public competitions announced by Politecnico di Milano;

HAVING REGARD TO Rectoral Decree no. 16188 of 5 November 2024, issuing the Code of Ethics and Conduct of Politecnico di Milano;

HAVING REGARD TO Rectoral Decree no. 15039 of 30 July 2025, issuing the Regulation for awarding research contracts (Art. 22 of Law No. 240/2010), postdoctoral contracts (Art. 22-bis of Law No. 240/2010) and research fellowships (Art. 22-ter of Law No. 240/2010);

HAVING REGARD TO the request submitted by the Scientific Supervisor to launch a Direct Call procedure for No. 1 Research Fellowships, for the Group of Academic Disciplines (GSD) 09/IIND-01 AEROSPACE AND NAVAL ENGINEERING, within the research program titled "**Simulation of on-orbit sensors for space traffic monitoring**", funded by external resources obtained at national, international or European level through competitive calls;

HAVING VERIFIED the availability of funds,

DECREES

Article 1 - Purpose

A Direct Call procedure is launched for the awarding of No. 1 Research Fellowships, pursuant to Article 22-ter of Law No. 240/2010:

Department: **Department of Aerospace Science and Technology**

Location: **Department of Aerospace Science and Technology**

Group of Academic Disciplines: **IIND-01/E – Aerospace Equipment and Systems**

Academic Discipline: **09/IIND-01 – AEROSPACE AND NAVAL ENGINEERING**

Fellowship duration: **12 months**

Research program title: **Simulation of on-orbit sensors for space traffic monitoring**

Research program: The research program focuses on space debris monitoring and characterization activities, with particular emphasis on the development, updating, and maintenance of the observational target catalog for advanced missions. In this context, the research is not solely aimed at the use of advanced sensors (such as neuromorphic cameras) but also at the investigation of more complex orbital regimes, including the cislunar environment. Within this framework, the work involves the construction and maintenance of a debris catalog through the acquisition of new observations, the validation of orbital and photometric data, and the periodic update of key parameters to ensure the reliability and completeness of the catalog. In parallel, the activity includes the definition and optimization of observation strategies for target tracking, with particular attention to the planning of observation sessions and the evaluation of orbital configurations through trade-off analyses. The overall objective is to enhance the effectiveness of onboard systems in detecting, classifying, and performing long-term monitoring of space debris through innovative strategies, thereby contributing to the safety and sustainability of operations in Earth orbit.

Required languages: **English** (Level of knowledge required: Good)

Funded project references: **MME5RUEU00 - ASTRAWARE - RIF. MAESTRINI**

Deadline for submitting expressions of interest: **26/11/2025**

Expected start date: **16/12/2025**

Article 2 - Eligibility requirements

Applicants, whether Italian or foreign nationals, may submit their expression of interest if they have a curriculum suitable for assisting in research activities and hold a Laurea Magistrale (Italian Master of Science) obtained no more than six years prior to the application deadline, belonging to the following LM degree classes:

Class of Master's Degrees in AEROSPACE AND ASTRONAUTICAL ENGINEERING

For the purpose of assessing the above academic qualification, the equivalences and equiparations among Italian academic degrees shall apply (<https://www.mur.gov.it/it/aree-tematiche/universita/equipollenze-equivalenza-ed-equiparazioni-tra-titoli-di-studio-0>).

Candidates who obtained their degree abroad no more than six years prior to the deadline may also participate. The degree must be official within the reference university system, issued by an officially accredited institution in the country of origin, and shall be recognized as equivalent, solely for the purpose of awarding the Research Fellowship, by the Scientific Supervisor, in terms of nature, level, and disciplinary correspondence. In foreign systems that provide a single, integrated pathway combining the second-cycle degree and the Ph.D. into a single award, the Scientific Supervisor shall assess the correspondence of that award, even if at a higher level.

The following individuals may not participate in this Direct Call procedure:

- Permanent staff (tenured) employed by Italian universities, public research institutions, or institutions whose scientific specialization diploma has been recognized as equivalent to a Ph.D. under Article 74, paragraph 4, of Presidential Decree No. 382 of 11 July 1980;
- Individuals who have held fixed-term researcher contracts pursuant to Article 24 of Law No. 240/2010 (RTDa, RTDb, RTT);
- Individuals who have a family or kinship relationship up to the fourth degree with a professor affiliated with the Department of Aerospace Science and Technology, or with the Rector, the General Director, or a member of the University's Board of Governors;
- Individuals who have already held Research Fellowships pursuant to Article 22-ter of Law No. 240/2010 at Politecnico di Milano or at other Italian universities (state, non-state, or online) or at the entities referred to in paragraph 1 of the same Article, for a period which, when added to the duration of the Fellowship offered here, exceeds a total of 3 years, even if not continuous. For the purpose of this calculation, periods of maternity/paternity or health leave are excluded in accordance with current regulations;
- Individuals who have already held research contracts (Art. 22), Postdoctoral contracts (Art. 22-bis), and research fellowships (Art. 22-ter), even if awarded or stipulated by different institutions, for a period which, when added to the duration of the Fellowship offered here, exceeds a total of 11 years, even if not continuous. For this calculation as well, maternity/paternity or health leave periods are excluded under the applicable regulations.

Art. 3 - Expressions of interest and submission deadline

To submit their expression of interest, candidates must fully complete and submit it, **under penalty of exclusion**, by the **strict deadline of 12:00 PM (Italian time) on 26/11/2025, using exclusively the form available on the University website, on the page of the procedure.**

The expression of interest, complete with all required attachments, may be submitted by **one of the following methods**:

- **Italian certified e-mail address (PEC):** the expression of interest must be sent from the candidate's own PEC address to pecdsta@cert.polimi.it with the subject line: **Direct Call procedure for Research Fellowships, procedure code 2025_IDRD_DAER_2**;
- **Standard email:** candidates may also submit their expression of interest via email to incarichidiricerca-daer@polimi.it using their personal email address, with the subject line: **Direct Call procedure for Research Fellowships, procedure code 2025_IDRD_DAER_2.**

Documentation submitted by means other than those specified in this notice will not be evaluated.

If the deadline falls on a public holiday, it will be extended to the next non-holiday (business) day.

In the expression of interest, candidates must indicate an email address and/or an Italian certified email address (PEC), to be used as the sole contact address for the procedure. Any change must be promptly communicated to the University. The University assumes no responsibility for incorrect contact details provided by applicants or for postal/communication issues.

Documents to be attached to the expression of interest:

- Scientific and professional CV (in Italian or English);
- A copy of a valid identification document.

For the purposes of this Direct Call procedure:

- If the Laurea Magistrale (Italian Master of Science) was obtained in Italy, it must be declared in the application summary;
- If the degree was obtained abroad, applicants must attach a copy of the degree with a translation into Italian or English, and a diploma supplement, a certificate of equivalence of qualification, or a transcript of completed exams, for assessment of equivalence by the Scientific Supervisor solely for the purpose of awarding the Fellowship.

Non-EU citizens regularly residing in Italy must attach to their application a copy of their residence permit or EU long-term residence permit ("permesso di soggiorno UE per soggiornanti di lungo periodo"), duly issued by the competent authority and currently valid, or a receipt proving they have applied for such documents.

Should these candidates be selected, the original residence permit, EU long-term residence permit, or the receipt proving the application for either document must be presented to the Visiting Professor Welcome Office no later than the date scheduled for signing the contract.

Failure to present this document will result in automatic forfeiture of the right to conclude the contract.

Non-EU citizens residing in their country of origin at the time of application, if selected, must present to the Visiting Professor Welcome Office the entry visa obtained following the authorization issued by the competent Prefecture (nulla osta), before the anticipated starting date of the research activity.

Failure to present this document will result in the inability to begin research activities.

Only documents effectively attached to the expression of interest will be considered for evaluation.

The University reserves the right to perform random checks on attachments and on the truthfulness of the statements made.

References to documents submitted for other selection procedures at Politecnico di Milano are not allowed.

Art. 5 - Selection procedure

The selection shall be carried out by the Direct Call of the Research Fellowships to the most qualified young scholars among those deemed suitable to perform the research activities covered by the Fellowship.

The evaluation of the expressions of interest is conducted by the Scientific Supervisor and may be supplemented by further interviews/clarifications with all or some candidates, in order to verify their aptitude and suitability to perform the research activities.

Following the evaluation, the Scientific Supervisor shall identify the candidates suitable to carry out the planned activities, issuing for each of them an overall assessment and evaluating any documentation relating to degrees obtained abroad. For each Fellowship, the Supervisor shall select, from among the suitable candidates, the one deemed most qualified, providing an adequate statement of reasons.

The assessments made, the reasons for the choices, and the merit ranking of eligible but not selected candidates shall be recorded in specific minutes. The Scientific Supervisor must conclude the selection process within one month from receipt of the expressions of interest transmitted by the competent Department Administration office; upon a reasoned request, the Head of Department may grant an extension of up to one month.

Art. 6 - Approval of proceedings

The Head of Department shall verify, by decree, the formal regularity of the proceedings. This decree, including the names of the selected candidates and the merit ranking of eligible but not selected candidates, is published by the Department Administration in the Official Register of the University and on the Politecnico di Milano website. Publication on the website constitutes formal notice to candidates under the applicable law. From the date of publication, the time limits for lodging any appeals begin to run.

The decree approving the proceedings, including the names of the selected candidates and the merit ranking of eligible but not selected candidates, must be transmitted to the competent Administration office, for the purpose of signing the Research Fellowship contracts, within 30 days from delivery of the evaluation minutes by the Scientific Supervisor. If the above time limits are not respected, this Direct Call procedure shall be revoked.

In cases where the selected candidates do not start the activities or formally decline, and provided there are other eligible candidates, the merit ranking of eligible but not selected candidates shall

be scrolled within 30 days from the date of non-start or the date of the formal decline, for the purpose of awarding the Research Fellowships.

Art. 7 - Contract

Within 30 days from the transmission of the decree approving the proceedings to the competent Administration office, the selected candidate shall be invited to sign the individual private-law contract in written form, which must, as a rule, be signed within 30 days from receipt of the invitation. The candidate shall submit the documentation required under the applicable regulations.

The individual private-law contract awarding the Research Fellowship does not establish an employment relationship and shall specify the functions, rights and duties related to the position, the start and end dates of the activities, the research program, the tasks, as well as the applicable economic and social-security treatment.

The contract shall be signed by the Research Fellow and the General Director, or their delegate.

The Research Fellow shall carry out their activity under the supervision of the Scientific Supervisor.

The Research Fellow is required to perform in full the research activities covered by the Fellowship, on an ongoing basis and not merely occasionally.

The Research Fellow shall start the activity according to the instructions issued by the Scientific Supervisor. Failure to start the activity in accordance with such instructions shall constitute a serious breach.

Should the Scientific Supervisor consider that the Fellow's activity is not proceeding correctly, they shall formally contest the breach, setting a time limit for remedy. If the breach persists, the Supervisor shall request an assessment of the Fellow by the Head of Department, who, after hearing the Fellow, shall draw up a specific report. A negative assessment shall constitute serious breach by the Fellow and shall result in termination of the contract by Politecnico di Milano.

Upon a proposal by the Scientific Supervisor, Research Fellowships may be extended for justified needs related to the completion or continuation of the planned research activities, or renewed for justified new needs connected with the research activity in which the Research Fellow is engaged.

At the end of the contract, the Research Fellow must submit a report on the research activity carried out and the results achieved within the project; the report shall be accompanied by the

assessment of the Scientific Supervisor. Failure to submit the report shall preclude renewal of the Fellowship.

Art. 8 - Termination

The contractual relationship shall terminate upon expiry of the term, withdrawal by either party, or any other termination cause provided under applicable regulations.

The Research Fellow may withdraw in writing by giving a written notice period of no less than 30 days, unless a written authorization is granted by the Scientific Supervisor or the Head of Department to withdraw with a shorter notice; in all cases, the notice period may not be shorter than 15 calendar days.

In case of failure to give notice, the University shall withhold from the Research Fellow an amount equal to the remuneration corresponding to the portion of notice not given.

Politecnico di Milano shall have the right to withdraw with immediate effect, without notice, by decree of the General Director (or their delegate) if any of the following occurs:

- a) the Research Fellow fails to comply with the obligations on incompatibilities under Article 45 of the Regulation for awarding research contracts (Art. 22 of Law No. 240/2010), Postdoctoral contracts (Art. 22-bis of Law No. 240/2010) and research fellowships (Art. 22-ter of Law No. 240/2010);
- b) the Research Fellow fails to start the activity in accordance with the instructions given by the Scientific Supervisor, in breach of Article 42, paragraph 3, of the Regulation for awarding research contracts (Art. 22 of Law No. 240/2010), Postdoctoral contracts (Art. 22-bis of Law No. 240/2010) and research fellowships (Art. 22-ter of Law No. 240/2010);
- c) negative assessment by the Head of Department, pursuant to Article 42, paragraph 4, of the Regulation for awarding research contracts (Art. 22 of Law No. 240/2010), Postdoctoral contracts (Art. 22-bis of Law No. 240/2010) and research fellowships (Art. 22-ter of Law No. 240/2010);
- d) the suspension period of the Fellowship compromises the performance of the research activity, as provided by Article 49, paragraph 2, of the Regulation for awarding research

- contracts (Art. 22 of Law No. 240/2010), Postdoctoral contracts (Art. 22-bis of Law No. 240/2010) and research fellowships (Art. 22-ter of Law No. 240/2010);
- e) failure to comply with any other specific obligation expressly set out in the contract.

In the aforementioned cases of withdrawal, the remuneration shall be paid pro rata to the period of activity actually performed by the Research Fellow, subject to prior approval by the Scientific Supervisor.

The Research Fellow who has incurred one of the incompatibilities provided for by the Regulation shall return any remuneration received in connection with the Research Fellowship for the period during which the incompatibility arose.

Any funds not used for the Research Fellowship shall be re-credited to the relevant Structures.

Art. 9 - Incompatibilities and additional assignments

The Research Fellowship awarded under this notice is incompatible with:

- any other employment relationship, including part-time or fixed-term employment, with public and private entities;
- the holding of research contracts (Art. 22 of Law No. 240/2010), postdoctoral contracts (Art. 22-bis of Law No. 240/2010) or other research fellowships (Arts. 22 and 22-ter of Law No. 240/2010), including those awarded by other Universities or public research bodies;
- the holding of PhD Scholarships or other scholarships, of any kind, awarded by national or foreign institutions for any reason, unless these are aimed at international mobility for research purposes.

Research Fellowships are not compatible with enrolment in Bachelor's or Master of Science programmes, Ph.D. programmes, or medical specialization schools, in Italy or abroad, without prejudice to the possibility of implementing specific EU research funding programmes under the Marie Skłodowska-Curie Actions (MSCA).

The Research Fellow may not engage in activities that could give rise to a conflict of interest with the activities of Politecnico di Milano.

The Research Fellow may carry out professional activities and enter into self-employment contracts, including support activities for teaching and research, provided that such activities do not interfere with the proper performance of the Fellowship and subject to prior written authorization by the Scientific Supervisor. In the absence of such authorization, these activities are incompatible with the Fellowship.

Research Fellowships do not entail any right of access to tenured positions at universities, public research bodies, or institutions whose scientific specialization diploma has been recognized as equivalent to a Ph.D. under Article 74, paragraph 4, of Presidential Decree no. 382 of 11 July 1980,

nor may they be counted for the purposes referred to in Article 20 of Legislative Decree No. 75 of 25 May 2017.

Art. 10 - Economic, social-security and insurance treatment

The overall amount of the Research Fellowship, equal to Euro 23.105,40, gross of the charges borne by the Research Fellow, for a contractual term of 12 months, shall be paid in monthly instalments in arrears.

For tax purposes, Article 4 of Law No. 476 of 13 August 1984 shall apply (exemption from local income tax and from personal income tax - IRPEF).

For social security, Article 2, paragraphs 26 et seq., of Law No. 335 of 8 August 1995 shall apply (obligation to register with the INPS Separate Management and to pay the related contributions).

For sick leave, Article 1, paragraph 788, of Law No. 296 of 27 December 2006 shall apply (right to INPS sickness allowance, within limits of duration and amount, in case the activity is suspended).

For compulsory maternity leave, the provisions of the Decree of the Minister of Labour and Social Security of 12 July 2007 shall apply. During the compulsory maternity leave period, the INPS allowance under Article 5 of the above Decree is integrated by Politecnico di Milano up to the full amount of the Fellowship remuneration.

Politecnico di Milano provides INAIL insurance coverage against accidents and for civil liability, with premiums borne by specific budget funds.

Politecnico di Milano shall withhold from the remuneration, for each calendar year, an amount corresponding to the insurance premium of the policy "Infortuni studenti, assegnisti di ricerca e figure assimilate."

Art. 11 - Intellectual property

Any potentially patentable innovation created by the Research Fellow in the performance of their duties shall be governed in compliance with the applicable legislation, the University Regulations, and any relevant contractual clauses.

Art. 12 - Personal data processing

Pursuant to EU Regulation no. 679/2016, candidates are informed that the personal data they provide will be processed, in paper or electronic format, exclusively for the purposes of this selection procedure and for the possible establishment of the employment relationship and for related management purposes.

Processing will be carried out by the personnel in charge of the procedure and by the Scientific Supervisor, using procedures that may also be computerized, to the extent and within the limits necessary to pursue the above purposes, including, where applicable, communication to third parties.

Provision of such data is necessary for evaluation purposes, verification of eligibility requirements, and assessment of qualifications declared. Failure to provide the data may prevent such checks and, in the cases provided for by this notice, may result in exclusion from the selection procedure. Additional data may be requested from candidates solely for the purposes indicated above.

The data collected may be disclosed to parties entitled under Law no. 241/1990, Legislative Decree no. 33/2013, and subsequent amendments.

Data will be retained, in compliance with applicable legislation, for no longer than is necessary to achieve the purposes for which they are processed.

Candidates are entitled to the rights set out in Chapter III of EU Regulation no. 679/2016, in particular the right to access their personal data and to request rectification, updating, or erasure if incomplete, incorrect, or collected unlawfully, as well as the right to object to processing on legitimate grounds. Further information is available on the University website: www.polimi.it/privacy.

Complaints may be submitted by contacting the Data Protection Officer (DPO) at: privacy@polimi.it.

Data Controller: Politecnico di Milano - General Director, by delegation of the Rector pro tempore - contact: dirgen@polimi.it.

Internal Data Processing Manager: The Director of the Human Resources and Organizational Development Division.

Art. 13 - Head of the procedure

Pursuant to Article 5 of Law no. 241 of 7 August 1990, the Head of the Procedure for this call is Enrico Eftimiadi, Human Resources and Organizational Development Division - Academic Staff Career Unit - Tel. 02.2399.2272 - 02.2399.2240 - 02.2399.2150 - Email: incarichidiricerca@polimi.it - Italian Certified Email (PEC): pecateneo@cert.polimi.it.

Art. 14 - Notice

This notice is published in the Official Register of the University and on the Politecnico di Milano website.

Art. 15 - Final provisions

For matters not expressly provided for in this notice, the provisions cited in the preamble of this decree, as well as current applicable legislation, shall apply where relevant.

The Head of the Department
(Prof. Marco Lovera)
Signed Prof. Marco Lovera

Digitally signed pursuant to the Digital Administration Code (CAD) - Legislative Decree No. 82/2005 and subsequent amendments.