

# EC Funding opportunities

2024

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# EC Fellowships

# European Fellowships



European Research Council

<https://erc.europa.eu/apply-grant>

**Starting grants** 2-7 years of experience since completion of PhD

**Consolidator Grants** 7-12 years post Ph.D

**Advanced Grants** >12 years post-Ph.D. but usually Professorial researchers

**Synergy Grants** provides funding for 2-4 Principal Investigators (PIs) to propose an ambitious, interdisciplinary research project. Projects will lead to breakthroughs not possible by any individual PI working with a single team

**Proof of Concept** complementary funding for Starting, Consolidator, Advanced and Synergy grantees.

**ERC Public Engagement** with Research Award Proof of Concept complementary funding for Starting, Consolidator, Advanced and Synergy grantees.

# European Fellowships



- European Research Council

**Starting grants** 2-7 years of experience since completion of PhD

Up to € 1.5 million for a period of 5 years. (pro rata for projects of shorter duration). However, **an additional € 1 million can be made available to cover eligible “start-up” costs** for researchers moving from a third country to the EU or an associated country and/or the purchase of major equipment and/or access to large facilities and/or other major experimental and field work costs.

An ERC grant can cover up to 100% of the total eligible direct costs of the research plus a contribution of 25% of the total eligible costs towards indirect costs.

# European Fellowships



- European Research Council

**Consolidator Grants** 7-12 years post Ph.D

Consolidator Grants may be awarded up to € 2 million for a period of 5 years. (pro rata for projects of shorter duration).

However, **an additional € 1 million can be made available to cover eligible “start-up” costs** for researchers moving from a third country to the EU or an associated country and/or the purchase of major equipment and/or access to large facilities and/or other major experimental and field work costs.

An ERC grant can cover up to 100% of the total eligible direct costs of the research plus a contribution of 25% of the total eligible costs towards indirect costs.

# European Fellowships



- European Research Council

**Advanced Grants >12 years post-Ph.D. but usually Professorial researchers**

Applicants for the ERC Advanced Grants - called Principal Investigators (PI) - are expected to be active researchers who have a track-record of significant research achievements in the last 10 years.

Advanced Grants may be awarded up to € 2.5 million for a period of 5 years. (pro rata for projects of shorter duration). However, **an additional € 1 million can be made available to cover eligible “start-up”** costs for researchers moving from a third country to the EU or an associated country and/or the purchase of major equipment and/or access to large facilities and/or other major experimental and field work costs.

An ERC grant can cover up to 100% of the total eligible direct costs of the research plus a contribution of 25% of the total eligible costs towards indirect costs.

# European Fellowships



- European Research Council

## Synergy Grants

A group of two to maximum four Principal Investigators (PIs) working together and bringing different skills and resources to tackle ambitious research problems. One will be designated as the corresponding PI (cPI).

PIs must present an early achievement track-record or a ten-year track-record, whichever is most appropriate. Proposals are evaluated on the sole criterion of scientific excellence which takes on the additional meaning of outstanding intrinsic synergetic effect.

Synergy Grants can be up to a maximum of € 10 million for a period of 6 years (pro rata for projects of shorter duration). However, **an additional € 4 million can be requested in the proposal in total to cover eligible 'start-up' costs** for Principal Investigators moving to the EU or an Associated Country from elsewhere as a consequence of receiving an ERC grant and/or the purchase of major equipment and/or access to large facilities.

An ERC grant can cover up to 100% of the total eligible direct costs of the research plus a contribution of 25% of the total eligible costs towards indirect costs.

# European Fellowships



## **Changes in 2023-24**

During its December plenary meeting the ERC Scientific Council decided on changes to the ERC's application forms and evaluation procedures for the 2024 calls.

**The current CV and Track Record templates will be combined and simplified and applicants will be able to add short narrative descriptions to explain the information provided.**

Applicants will also be invited to explain career breaks or unconventional career paths and to describe exceptional contributions to the research community.

**One effect of these changes is that the Profiles of the ERC Principal Investigators which appeared in previous Work Programmes will no longer be necessary.**

**The Scientific Council has furthermore decided to explicitly weigh the project proposal more than the past achievements of the applicant during the evaluation.**

Full details will be found in the ERC Work Programme 2024 and the associated guidance documents.



# European Fellowships



## Changes in 2023-24

The Scientific Council's intention is to make **two significant changes** in the upcoming Work Programme: to restructure selected evaluation panels and add one additional panel (in Social Sciences and humanities), and **to introduce lump sum funding in Advanced Grants.**

# Physics P4 of MSCA (Marie Curie)

- P4-Astrophysics, Cosmology, Space science
- Astrobiology
- Astrochemistry
- Clusters of galaxies and large scale structures
- Cosmology
- Dark matter, dark energy
- Exoplanets
- Formation and evolution of galaxies
- Formation of stars and planets
- Gravitational astronomy
- High energy and particles astronomy - X-rays, cosmic rays, gamma rays, neutrinos
- Instrumentation - telescopes, detectors and techniques
- Interstellar medium
- Nuclear astrophysics
- Observational astronomy: radio
- Relativistic astrophysics
- Solar and interplanetary physics
- Solar physics
- Space weather
- Stellar systems: multiple stars, clusters, and associations

# MSCA Fellowships



- *Postdoctoral Fellowships (PFs)* are fellowships for Postdoctoral Researchers who, at the date of the call deadline, **in possession of a doctoral degree, defined as a successfully defended doctoral thesis, even if the doctoral degree has yet to be awarded.**
- **A maximum of 8 years full-time equivalent experience in research.** This is measured from the date that the researcher was in possession of a doctoral degree and certified by appropriate documents.
- **European Postdoctoral Fellowship (EF)** 12 and 24 months. They are hosted by a research organisation in a MS or AC. The host organisation provides the researchers with a contract of employment for the duration of the project and a supervisor.
- **Global Postdoctoral Fellowship (GF)** 24 and 36 months. GFs have an outgoing phase in a Third Country. A Third Country is any country that is not an MS or AC. The outgoing phase lasts between 12 and 24 months. The outgoing phase is followed by a mandatory 12 month return phase in an EU Member State or Associated Country.
- **Next call September 2024**

# Widening participation

- Special additional funding for Fellowships in **underrepresented states of Europe** (Central and Eastern Europe, South East Europe, Portugal)
- Those projects that are near cut-off can be funded by this additional budget.

# What next in infrastructures?

- Infrastructures Calls 2024
  - Destination - Developing, consolidating and optimising the European research infrastructures landscape, maintaining global leadership (INFRADEV),
  - Destination - Enabling an operational, open and FAIR EOSC ecosystem (INFRAEOSC)
  - Destination - RI services to support health research, accelerate the green and digital transformation, and [advance frontier knowledge](#) (INFRASERV)
  - Destination - Next generation of scientific instrumentation, tools and methods and advanced digital solutions (INFRATECH)
  - Destination - Network connectivity in Research and Education – Enabling collaboration without boundaries (INFRANET),

# Infrastructures Calls 2023 -24

**HORIZON-INFRA-2023-DEV-01-03: Consolidation of the RI landscape – Individual support for evolution and long-term sustainability of pan-European research infrastructures 3.00 and 4.00 million must include at least one of the ESFRI Landmarks or European Research Infrastructures Consortia (ERICs) 12 Mar 2024**

**Expected Outcome:** Project results are expected to contribute to several of the following expected outcomes:

- better structured and strengthened European research infrastructure landscape;
- new services available to a wider user community, including participants in other parts of Horizon Europe, allowing to better tackle scientific and societal challenges;
- increased capacity to address EU policy priorities and/or support EU industry;
- reinforced global competitiveness of the European Research Area;
- reduction of environmental (including climate-related) impacts as well as optimisation of resource and energy consumption integrated through the full life cycle of research infrastructures;
- increased long-term sustainability of European research infrastructures;
- **Follow up to SpaceSci for Space Sector?**

# Infrastructures Calls 2023 -24

**HORIZON-INFRA-2024-DEV-01-01: Research infrastructure concept development**  
**1.00 and 3.00 million 12 Mar 2024**

This topic aims at supporting the development of new concepts for the next generation of research infrastructures of European interest, single/multi sited, distributed or virtual, that none or few countries might individually be able to implement. **All fields of research can be considered.**

Major upgrades of existing infrastructures may also be considered if the end result is significantly transformative and equivalent to a new infrastructure concept

European lunar institute ?

# Infrastructures Calls 2023 -24

**HORIZON-INFRA-2024-DEV-01-02: Strengthen the bilateral cooperation on research infrastructures with Africa 1.50 million 12 Mar 2024**

**Expected Outcome: Project results are expected to contribute to all the following expected outcomes:**

- **contribution to the new Commission strategy with Africa, notably to the following**
- **specific objectives: rapidly enhance learning, knowledge and skills, research and**
- **innovation capacities (with attention to female and young researchers);**
- **enhanced research capacities in Africa;**
- **enhanced Euro-African cooperation in R&I.**

**Scope: This topic aims at fostering EU-Africa cooperation in Research Infrastructures, sharing of good practices and experiences to facilitate the development of a strategic approach for structuring RI capacities at pan-African level in fields other than those addressed by topic HORIZON-INFRA-2021-DEV-01-02.**

**Good topic for bid in Space/astronomy?**



# Infrastructures Calls 2023 -24

**HORIZON-INFRA-2024-TECH-01-01: R&D for the next generation of scientific instrumentation, tools, methods, solutions for RI upgrade 5.00 and 10.00 million 12 Mar 2024**

**Consortia must include at least 3 different research infrastructures, each of them being an ESFRI infrastructure, and/or a European Research Infrastructures Consortium (ERIC) or another research infrastructure that is an intergovernmental organisation of European interest.**

**Expected Outcome: Project results are expected to contribute to several of the following expected outcomes:**

- **enhanced scientific competitiveness of European research infrastructures;**
- **enhanced RI capacities to address research challenges and EU policy priorities;**
- **foundations for the development of innovative companies;**
- **increased collaboration of research infrastructures with universities, research organisations and industry;**
- **increase of the technological level of industries through the co-development of advanced**
- **technologies for research infrastructures and creation of potential new markets;**
- **integration of research infrastructures into local, regional and global innovation systems and promotion of entrepreneurial culture.**

# Horizon Europe Cluster 4 (Space)

- **Call** - STRATEGIC AUTONOMY IN DEVELOPING, DEPLOYING AND USING GLOBAL SPACE-BASED INFRASTRUCTURES, SERVICES, APPLICATIONS AND DATA 2024
- This covers applications to the Copernicus programme  
Deadline 20 Feb 2024
  - HORIZON-CL4-2024-SPACE-01-35: Copernicus for Land and Water
  - HORIZON-CL4-2024-SPACE-01-36: Copernicus for Security
  - Quantum space Gravimetry
    - HORIZON-CL4-2024-SPACE-01-64: Quantum Space Gravimetry Phase-B study & Technology Maturation

# Horizon Europe Cluster 4 (Space)

**HORIZON-CL4-2024-SPACE-01-73: Space technologies for European non-dependence and competitiveness**

**Projects 2.00 and 3.00 million Total available 20 million**

- Low shock Non-Explosive Actuators (NEA) for smallsats [Target TRL 7]
- High data rate (12.5 to 28 Gbps or higher 56 Gbps), low consumption, short range links [Target TRL 7]
- Power laser sources in the eye-safe region [Target TRL 6]
- Enhanced performance and space qualified detectors – visible range [Target TRL 7-8]
- Ultra Deep Submicron technology for next generation space integrated circuits: ASICs,
- FPGA and microprocessors [Target TRL 5]
- Discrete power devices (200V normally-off GaN) [Target TRL 7]
- Photonics components [Target TRL 7]

# ESA

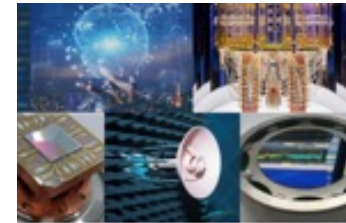


- Innovation areas
- General Support Technology Programme (GSTP)
- In the frame of the General Support Technology Programme (GSTP), the European space industry develops leading edge space technologies that enable missions to discover the Universe, understand our environment, navigate, educate and save lives.

# ESA innovation



- Earth Observation
- General Support Technology Programme (GSTP)
- Discovery
- Human and Robotic Exploration
- Connectivity and Secure Communications
- Space Transportation
- Space Technology Transfer
- Operations Innovations
- External innovation
- Preparation





# NATO

- NATO's approach to space

In 2019, NATO recognised space as a new operational domain, alongside air, land, maritime and cyberspace. This policy guides NATO's approach to space and ensures the right space-based support to the Alliance's operations and missions in such areas as communications, navigation and intelligence.

#### NATO BUSINESS PORTAL

This portal was designed to guide readers through the business opportunities offered by various NATO bodies and organisations. It is a gateway to more detailed information, accessible on the respective organizations' websites, which may require security credentials.

<https://www.nato.int/cps/en/natohq/62249.htm>



# NATO

NATO's approach to space

Science for Peace and Security (SPS) Programme

Security-related Advanced Technology

Emerging technologies including nanotechnology, optical technology, micro satellites, metallurgy and the development of Unmanned Aerial Vehicle (UAV) platforms.

<https://www.nato.int/cps/en/natohq/79910.htm>

# NATO



## NATO's approach to space Science for Peace and Security (SPS) Programme

Aim to host a workshop bringing together NATO (space command) and Academic/industry space sectors to discuss research needs

Topics – Dust and impacts

Space junk

Protection of satellites from attack)

The question of lunar bases and treaties

Communications

Cameras

Role of cubesats



- Expertise in the Europlanet community to exploit



# Networking - COST



- COST does not provide funding for research. Instead, it focuses on connecting communities of researchers and innovators from universities, as well as from public and private institutions, NGOs, industry and SMEs.
- COST mission is: ‘to provide networking opportunities for researchers and innovators in order to strengthen Europe’s capacity to address scientific, technological and societal challenges’.
- **New COST Action 2023 CA22133 - The birth of solar systems (PLANETS)** Started September 2023 to 2027
- **Next call for proposals is October 2024**

# Questions ?

- If you have questions or

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