

ERC grants | Understanding the (not) so basic

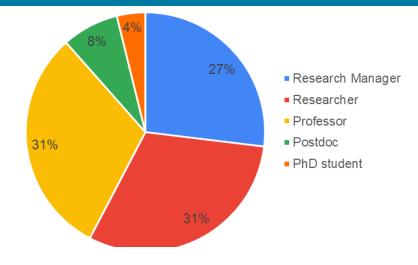
Mariana Santa-Marta, PhD Head of Pre-award efforts @CERENA and CEGIST (IST)



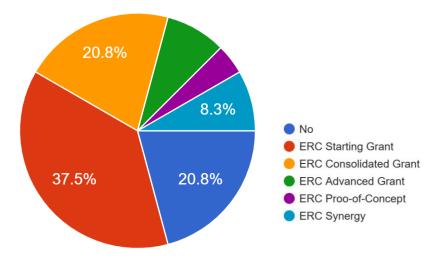




Who are You?

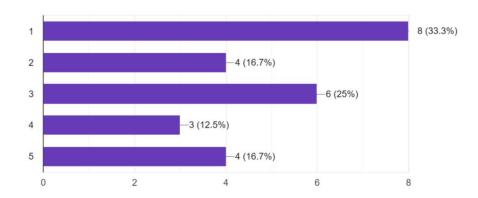


Are you planning on submitting an application to the ERC calls? 24 responses



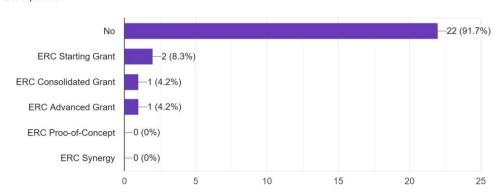
Are you familiar with ERC funding schemes? (Scale of 1 to 5, where 1 = Not at all familiar and 5 = Very familiar)

24 responses



Have you already applied to the ERC funding scheme? If yes, in which ERC funding scheme have you submitted an application?

24 responses



HORIZON EUROPE

SPECIFIC PROGRAMME IMPLEMENTING HORIZON EUROPE & EIT

Exclusive focus on civil applications



European Research Council

Marie Skłodowska-Curie

Research Infrastructures



Clusters

Pillar II
GLOBAL CHALLENGES &
EUROPEAN INDUSTRIAL
COMPETITIVENESS

- Health
- Culture, Creativity & Inclusive Society
- Civil Security for Society
- · Digital, Industry & Space
- Climate, Energy & Mobility
- Food, Bioeconomy, Natural Resources, Agriculture & Environment

Joint Research Centre



European Innovation Council

European Innovation Ecosystems

European Institute of Innovation & Technology*

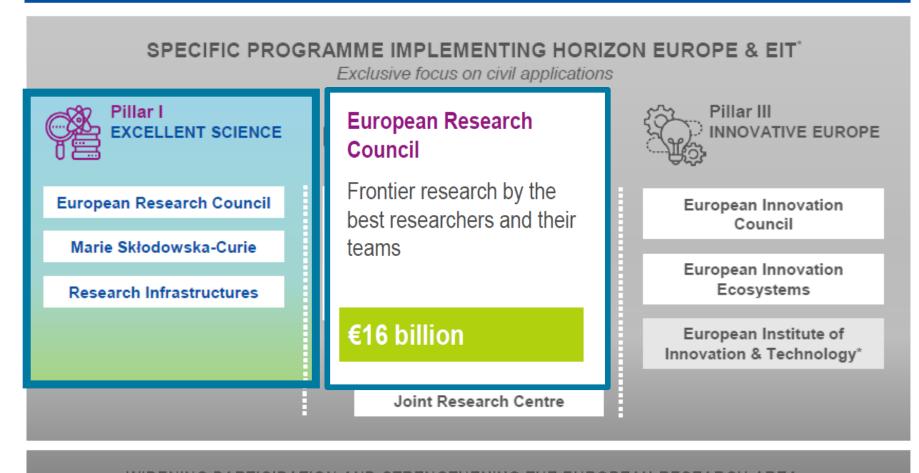
WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation & spreading excellence

Reforming & Enhancing the European R&I system

^{*} The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme

HORIZON EUROPE



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ERC as a Career Development Grant



European Research Council

Established by the European Commission

A **bottom-up** approach, **individual-based**, **pan European** with **host institutions** in **EU** or **Associated countries**



Strategy

- ✓ Support for **Individual** Researchers (not institutions)
- ✓ International peer-review
- ✓ No pre-determined subject (bottom-up)
- ✓ Support for frontier research in all fields of science and humanities
- ✓ Look for high gain ambitious project
- ✓ Institutional Commitment and Grant portability

egislation

- ✓ Scientific governance by an independent **22-member** Scientific council which as full authority over funding and evaluation
- ✓ Support by the **ERC Executive Agency** (autonomous)
- ✓ Only criterion: quality of research aiming for excellence.







Types of ERC Grants

Starting Grants

2-7 years after PhD (≥ 50% commitment) up to €1.5 Million for 5 years

Consolidator Grants

7-12 years after PhD (≥ 40% commitment) up to €2 Million for 5 years

Advanced Grants

track-record of
significant research
achievements in the
last 10 years
(≥ 30% commitment)
up to €2.5 Million
for 5 years

Additional funding:

- Start-Up costs for scientists moving to EU / Associated Countries
- Purchase of major equipment
- Access to large facilities

Proof-of-Concept

of marketable innovation
up to €150,000 for ERC grant holders only

Synergy Grants
2-4 PIs up to €10 million for 6 years
to lead to breakthroughs that cannot be
achieved by a PI working alone

Step by Step

Before the call is published:

- 1. Get familiar with the ERC funding scheme: Read the Official docs
 - ERC 2025 Work Programme
 - Information for applicants
 - Guide for peer reviewers
- 2. Find out which ERC grant and which call is suitable for you.
- 3. Which **Project** should I submit
- 4. When should I apply (plan strategically): Verify your eligibility Enspire calculator / understand evaluation restrictions
- 5. Identify the **Host Institution** and team members you would like to work with.
- 6. Contact the **Grants Office** of your ERC Host Institution

ERC Training Academy (You tube Channel)

- 1) How to get started
- 2) Writing part 1
- 3) Writing part 2
- 4) How you are evaluated

ERC Starting Grant: https://erc.europa.eu/apply-grant/starting-grant

- Objective: support excellent PIs at the stage at which they are starting their own independent research team or programme
- Grant size: €1.5M (possibility of additional €1M)
- PI Profile:
 - Potential for research independence
 - → At least one publication as main author or without PhD supervisor
 - → Invited presentations in conferences
 - → Funding, patents, awards, prizes
 - → 50% of PI's time in the project + 50% in the EU or AC
 - > 2 and ≤ 7 years of the certified date of the successful defence of first PhD degree on 1 January (year of the call)

Starting Grants

>2-7 years after PhD
≥ 50% commitment
up to 1.5 M€
(+ 1 M€)
for 5 years

Deadline: ~October (previous year)

PhD Defense date ERC STG

ERC Starting Grant – Sucess Rates

	2022		2023		2024		2025	
	Submitted	Selected	Submitted	Selected	Submitted	Selected	Submitted	Selected
Life Sciences	860	124	735	110	992	146	1081	
Physical Sciences and Engineering	1224	168	1150	173	1463	209	1660	
Social Sciences and Humanities	848	116	811	117	1039	139	1187	
Total	2932	408	2696	400	3474	494	3928	?

0 for PT

Sucess rate ≈ 13.9 % Sucess rate ≈ 14.8 % 6 for PT

Sucess rate ≈ 14.2 % 4 for PT

Sucess rate ≈?

ERC Consolidator Grant https://erc.europa.eu/apply-grant/consolidator-grant

- Objective: support excellent PIs at the stage at which they may still be consolidating their own independent research team or programme
- Grant size: €2M (possibility of additional €1M)
- PI Profile:
 - → Has achieved a certain degree of research independence
 - Several publications as main author or without PhD supervisor
 - → Invited presentations in conferences
 - Funding, patents, awards, prizes, mentoring
 - → 40% of PI's time in the project + 50% in the EU or AC
 - > 7 and ≤ 12 years of the certified date of the successful defence of first PhD degree on 1 January (year of the call)

Consolidator Grants

7-12 years after PhD ≥ 40% commitment up to 2 M€ (+ 1 M€) for 5 years

Deadline: ~January

PhD Defense date

ERC COG

ERC Consolidator Grant – Sucess Rates

	2022		2023		2024		2025	
	Submitted	Selected	Submitted	Selected	Submitted	Selected	Submitted	Selected
Life Sciences	612	91	612	89	652	94	820	
Physical Sciences and Engineering	938	133	881	129	928	131	1268	
Social Sciences and Humanities	672	97	637	90	733	103	1033	
Total	2222	321	2130	308	2313	328	3121	

Sucess rate ≈ 14.4 % 4 for PT

Sucess rate ≈ 14.5 % 3 for PT

Sucess rate ≈ 14.2 % 3 for PT Sucess rate ≈?

Extensions of elegibility window

- Maternity 18 months per child (before or after PhD defence). For longer maternity leaves -documented amount of actual leave taken until the call deadline
- Paternity actual time taken off
- **Long-term illness**: Over 90 days for the Principal Investigator or a close family member (child, spouse, parent or sibling) documented amount for each incident after PhD defence date.
- Disability: reduced amount of working time (including leave taken) and/or the degree of disability as documented by the Principal Investigator after PhD defence
- Military service actual time taken off
- Clinical training: documented amount of clinical training received by the Principal Investigator after the award of the first eligible degree and until the call deadline (up to 4 years)
- No limit to the total extension

ERC Advanced Grant

- Objective: established research leaders with a recognised trackrecord of research achievements in the last 10 years
- Grant size: €2.5M (possibility of additional €1M) lump sum
- PI Profile:
 - Active researchers with a significant track record in the last 10 years
 - → 10 top publications/3 research monographs as main author
 - → Invited presentations, organisation of major conferences
 - → Funding, patents, awards, prizes, mentoring
 - → 30% of PI's time in the project + 50% in the EU or AC

Advanced Grants

significant research records in the last 10 years ≥ 30% commitment up to 2.5 M€ (+ 1 M€) for 5 years

Deadline: May/Jun

ERC Advanced Grant - Sucess Rates

	2022		202	3	2024	
	Submitted	Selected	Submitted	Selected	Submitted	Selected
Life Sciences	467	64	517	75	730	?
Physical Sciences and Engineering	711	96	787	107	1068	?
Social Sciences and Humanities	469	69	525	73	736	?
Total	1647	218	1829	225	2534	?

Sucess rate ≈ 13.2% Sucess rate ≈ 13.9%

Proposal Structure

PART A – online forms

A1 Proposal info

A2 Host Institution and PI info

A3 Budget & Budget Justification

A4 Ethics Self-assessment

A5 Call Specific Info (doctoral training, extensions, excluded reviewers etc.)

<u>Annexes – submitted as .pdf</u>

- HI support letter
- Copy of PhD title (with PhD defense date)
- Documents for extension of eligibility window

Admissibility and eligibility check

Application forms

HORIZON

Call: ERC-2025-COG

(Call for Proposals for ERC Consolidator Grant)

Topic: ERC-2025-COG

Type of Action: HORIZON-ERC

Proposal number:

Proposal acronym:

Type of Model Grant Agreement: HORIZON Action Grant Budget-Based

Table of contents

Section	Title	Action
1	General information	
2	Participants	
3	Budget	
4	Ethics and security	
5	Other questions	

ACRONYM

Applicant's last name Part B1

ERC Consolidator Grant 2025 Research proposal [Part B1]¹ (Part B1 is evaluated in Step 1 and Step 2, Part B2 is evaluated in Step 2 only)

Proposal Full Title
PROPOSAL ACRONYM

Cover Page

- Name of the Principal Investigator (PI)
- Name of the PI's Host Institution for the project
- Proposal duration in months

Please delete all text highlighted in grey in this template.

Proposal summary (identical to the abstract from the online proposal submission forms, section 1).

The abstract (summary) should, at a glance, provide the reader with a clear understanding of the objectives of the research proposal and how they will be achieved. The abstract will be used as the short description of your research proposal in the evaluation process and in communications to contact in particular potential independent external experts and/or to inform the Commission and/or the programme management committees and/or relevant national funding agencies. It must therefore be short and precise and should not contain confidential information.

Please use plain typed text, avoiding formulae and other special characters. The abstract must be written in English. There is a limit of 2000 characters (spaces and line breaks included).

Explain and justify the cross-panel or cross domain nature of your proposal, if a secondary panel is indicated in the online proposal submission forms. There is a limit of 1000 characters (spaces and line breaks included).

PART B1 – submitted as .pdf

- Abstract (up to 2000 characters)
- Extended Synopsis

5 p.

CV & Track Record

4 p.

- Personal details
- Research achievements & Peer Recognition
- Additional Information (career breaks, diverse career paths, major life events & other contributions)

Applicant's last name

Part B1

ACRONYM

Section b: Curriculum vitae and Track Record (max. 4 pages)

[You may modify the below template if necessary.]

PERSONAL DETAILS

[Provide your personal details, your education and key qualifications, current position(s) and relevant previous positions you have held.]

Family name, First name:

Researcher unique identifier(s) (such as ORCID, Research ID, etc. ...):

URL for web site:

· Education and key qualifications

DD/MM/YYYY PhD

Name of Faculty/ Department, Name of University/ Institution, Country

Name of PhD Supervisor

YYYY

Master

Name of Faculty/ Department, Name of University/ Institution, Country

Current position(s)

YYYY - YYYY Current Position

Name of Faculty/ Department, Name of University/ Institution/ Country

YYYY - YYYY Current Position

Name of Faculty/ Department, Name of University/ Institution/ Country

Previous position(s)

YYYY - YYYY Position held

Name of Faculty/ Department, Name of University/ Institution/ Country

YYYY - YYYY Position held

Name of Faculty/ Department, Name of University/ Institution/ Country

RESEARCH ACHIEVEMENTS AND PEER RECOGNITION

Research achievements

Provide a list of up to ten research outputs that demonstrate how you have advanced knowledge in your field with an emphasis on more recent achievements, such as publications, articles deposited in a publicly available preprint server, books, book chapters, conference proceedings, data sets, software, patents, licenses, standards, start-up businesses or any other research outputs you deem relevant in relation to your research field and your project.

You may include a short, factual explanation of the significance of the selected outputs, your role in producing each of them, and how they demonstrate your capacity to successfully carry out your proposed project.]

Peer recognition

PART B1 – submitted as .pdf

- Abstract (up to 2000 characters)
- Extended Synopsis

5 p.

CV & Track Record

4 p.

- Personal details
- Research achievements & Peer Recognition
- Additional Information (career breaks, diverse career paths, major life events & other contributions)

ERC Consolidator Grant 2025 Part B2¹ (not evaluated in Step 1)

Sections (a) and (b) of Part B2 should not exceed 14 pages. References do not count towards the page limits.

Text highlighted in grev should be deleted.

Please respect the following formatting constraints: Times New Roman, Arial or similar, at least font size 11, margins (2.0 cm side and 1.5 cm top and bottom), single line spacing. Do NOT split the sections, references and/or the appendix (Funding ID) and do NOT upload them as separate documents.

Section a. State-of-the-art and objectives

Section b. Methodology

Do NOT include any description of resources or budget table here (Part B2). The Resources section and the detailed budget table are part of the online submission form (Part A, Section 3 - Budget) which will be extracted and provided to the peer reviewers. If additional documents are uploaded in the submission system as separate attachments, the peer reviewers will not have access to them.

PART B1 – submitted as .pdf

- Abstract (up to 2000 characters)
- Extended Synopsis

5 p.

CV & Track Record

4 p.

- Personal details
- Research achievements & Peer Recognition
- Additional Information (career breaks, diverse career paths, major life events & other contributions)

PART B2 – submitted as .pdf

Scientific Proposal

14 p.

- State of the Art & Objectives
- Methodology

STEP 1

Proposal Structure

PART A – online forms

A1 Proposal info

A2 Host Institution and PI info

A3 Budget & Budget Justification

A4 Ethics Self-assessment

A5 Call Specific Info (doctoral training, extensions, excluded reviewers etc.)

<u>Annexes – submitted as .pdf</u>

- HI support letter
- Copy of PhD title (with PhD defense date)
- Documents for extension of eligibility window

Admissibility and eligibility check

PART B1 – submitted as .pdf

- Abstract (up to 2000 characters)
- Extended Synopsis
- CV & Track Record
 - Personal details
 - Research achievements & Peer Recognition
 - Additional Information (career breaks, diverse career paths, major life events & other contributions)

PART B2 – submitted as .pdf

Scientific Proposal

- State of the Art & Objectives
- Methodology

STEP 1

5 p.

4 p.

14 p.

ERC Panel Structure 2025 (28 panels)

Each panel:

Panel Chair and 11-16 Panel Members

Panel members

- □ cover the full range of areas inside a specific panel (check ERC Panel descriptors)
- ☐ alternate in odd and even years with some changes

(at the application stage only the panel chair is released)

Tip: Check for panel members' names here, to (try to) understand who will be evaluating you on a specific year

ERC Panel Structure 2025 (28 panels)

Each panel:

Panel Chair and 11-16 Panel Members

Physical Sciences & Engineering

PE1 Mathematics

PE2 Fundamental Constituents of Matter

PE3 Condensed Matter Physics

PE4 Physical and Analytical Chemical Sciences

PE5 Synthetic Chemistry and Materials

PE6 Computer Science and Informatics

PE7 Systems and Communication Engineering

PE8 Products and Processes Engineering

PE9 Universe Sciences

PE10 Earth System Science

PE11 Materials Engineering

Social Sciences and Humanities

SH1 Individuals, Markets and Organisations

SH2 Institutions, Governance and Legal Systems

SH3 The Social World and Its Interactions

SH4 The Human Mind and Its Complexity

SH5 Texts and Concept

SH6 The Study of the Human Past

SH7 Human Mobility, Environment, and Space

SH8 Studies of Cultures and Arts

Life Sciences

LS1 Molecules of Life: Biological Mechanisms, Structures and Functions

LS2 Integrative Biology: from Genes and Genomes to System

LS3 Cell Biology, Development, Stem Cells and Regeneration

LS4 Physiology in Health, Disease and Ageing

LS5 Neuroscience and Disorders of the Nervous System

LS6 Immunity, Infection, and Immunotherapy

LS7 Prevention, Diagnosis and Treatment of Human Diseases

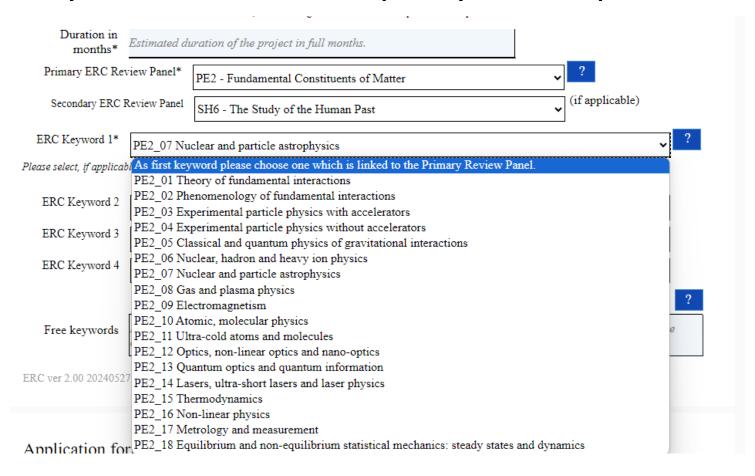
LS8 Environmental Biology, Ecology and Evolution

LS9 Biotechnology and Biosystems Engineering

ERC Panel and Keywords

ERC Panel Structure 2025 (28 panels)

Keyword Selection defines the primary evaluation panel



ERC Keyword 1 (Primary panel)

ERC Keyword 2 (any panel)

ERC Keyword 3 (any panel)

ERC Keyword 4 (any panel)

Free keywords

(what are and why are they needed?)

ERC Panel and Keywords

ERC Panel Structure 2025 (28 panels)

Physical Sciences and Engineering

PE1 Mathematics

All areas of mathematics, pure and applied, plus mathematical foundations of computer science, mathematical physics and statistics

- PE1_1 Logic and foundations
- PE1_2 Algebra
- PE1_3 Number theory
- PE1_4 Algebraic and complex geometry
- PE1_5 Lie groups, Lie algebras
- PE1_6 Geometry and global analysis
- PE1 7 Topology
- PE1 8 Analysis
- PE1_9 Operator algebras and functional analysis
- PE1 10 ODE and dynamical systems
- PE1 11 Theoretical aspects of partial differential equations
- PE1_12 Mathematical physics
- PE1 13 Probability
- PE1 14 Mathematical statistics
- PE1_15 Generic statistical methodology and modelling
- PE1 16 Discrete mathematics and combinatorics
- PE1 17 Mathematical aspects of computer science
- PE1_18 Numerical analysis
- PE1_19 Scientific computing and data processing
- PE1_20 Control theory, optimisation and operational research
- PE1_21 Application of mathematics in sciences
- PE1_22 Application of mathematics in industry and society

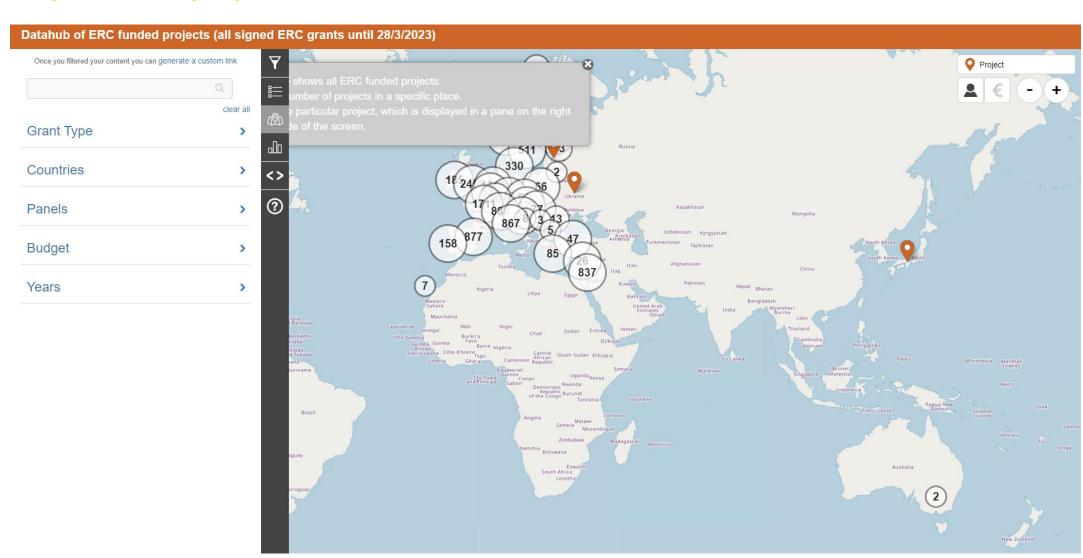
PE2 Fundamental Constituents of Matter

Particle, nuclear, plasma, atomic, molecular, gas, and optical physics

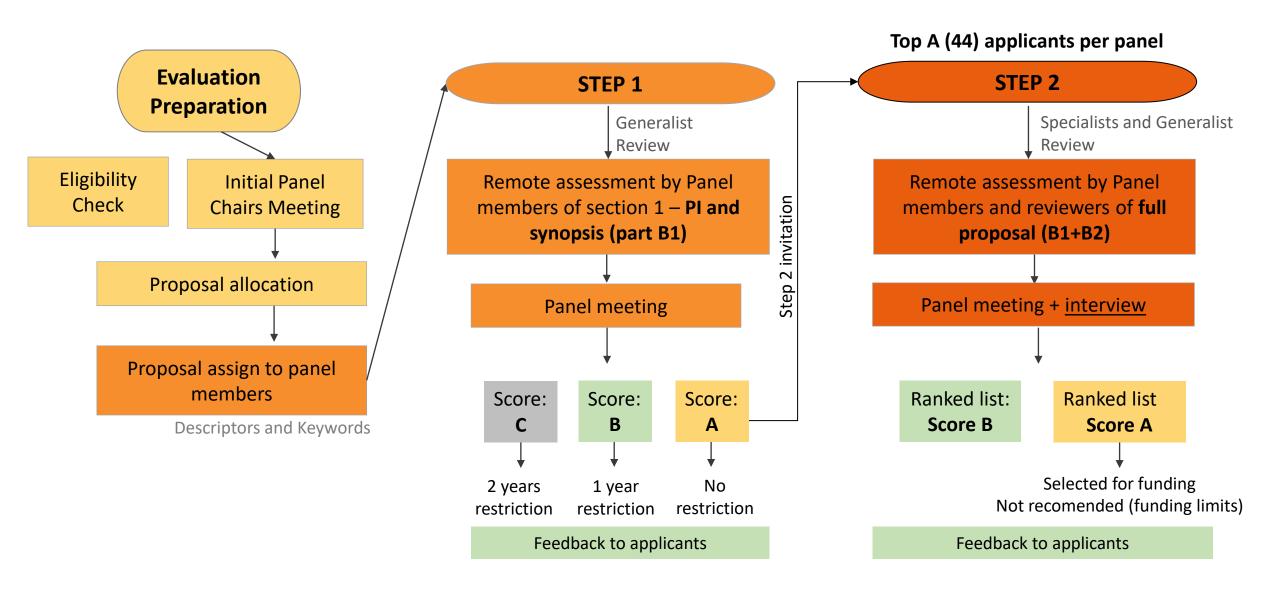
- PE2_1 Theory of fundamental interactions
- PE2_2 Phenomenology of fundamental interactions
- PE2_3 Experimental particle physics with accelerators
- PE2_4 Experimental particle physics without accelerators
- PE2_5 Classical and quantum physics of gravitational interactions
- PE2 6 Nuclear, hadron and heavy ion physics
- PE2_7 Nuclear and particle astrophysics
- PE2_8 Gas and plasma physics
- PE2_9 Electromagnetism
- PE2_10 Atomic, molecular physics
- PE2_11 Ultra-cold atoms and molecules
- PE2_12 Optics, non-linear optics and nano-optics
- PE2_13 Quantum optics and quantum information
- PE2_14 Lasers, ultra-short lasers and laser physics
- PE2_15 Thermodynamics
- PE2_16 Non-linear physics
- PE2_17 Metrology and measurement
- PE2_18 Equilibrium and non-equilibrium statistical mechanics: steady states and dynamics

ERC Hub: https://erc.easme-web.eu/

Finding and fitting my idea



ERC Proposals Evaluation



ERC Evaluation Form — 2 criteria only

1. Research Project Ground-breaking nature, ambition and feasibility

Ground-breaking nature and potential impact of the research project

- ✓ To what extent does the proposed research address important challenges?
- ✓ To what extent are the objectives ambitious and beyond the state of the art (e.g. novel concepts and approaches or development between or across disciplines)?

Scientific Approach

- ✓ To what extent is the outlined scientific approach feasible bearing in mind the groundbreaking nature and ambition of the proposed research (based on the Extended Synopsis)?
- ✓ To what extent does the proposal go beyond what the individual Principal Investigators could achieve alone (**for Synergy Grants**, based on the Extended Synopsis)?
- ✓ To what extent do the Principal Investigators succeed in proposing a combination of scientific approaches that are crucial to address the scope and complexity of the research questions to be tackled **(for Synergy Grants**, based on the Extended Synopsis)?
- ✓ To what extent are the proposed research methodology and working arrangements appropriate to achieve the goals of the project (based on the research proposal)?
- ✓ To what extent are the proposed timescales, resources, and PI commitment adequate and properly justified (based on the research proposal)?

ERC Evaluation Form — 2 criteria only

2. Principal Investigator

Intellectual capacity and creativity

- ✓ To what extent has the PI demonstrated the ability to conduct ground-breaking research?
- ✓ To what extend does the PI provide evidence of creative independent thinking?
- ✓ To what extent does the PI have the required scientific expertise and capacity to successfully execute the project?

Step by Step Start thinking today:





- 2. What do I want to research for 5 years that is bold, relevant, curiosity-driven, and aligned with my CV and skills?
- 3. Search for **inspiration** on the ERC Hub (panels, style, etc)
- 4. Contact previous applicants and awardees Find a mentor?
- 5. Prepare an outline of your project (draw a roadmap of what you want to do, why and how), gather preliminary data (if possible)
- 6. Decide the structure of your proposal
- 7. **Start writing** Write for generalists, provide context, definitions and details (this is how you showcase your expertise)
- 8. An ERC is not a review paper.... Is a statement of need with detailed actions toward a major scientific advance.

Step by Step

Once the call is open:



- 1. Read the call documents carefully.
- Contact the Host Institution and gather all the details you need for the application.
- 3. Start writing your proposal. Allow time for other people to review your draft.
- 4. Familiarise yourself with the EU submission service.
- 5. Submit your proposal as early as possible. Deadlines cannot be changed under any circumstances. You can update your submitted proposal any time before the deadline by simply submitting a new version, which will overwrite the old one.
- 6. You will get an 'acknowledgement of receipt' by e-mail for each submission.

Step by Step

After the deadline



1. The ERC will check whether your proposal meets the call's eligibility criteria.

2. External experts will evaluate all the eligible proposals.

3. You will receive further information as your proposal progresses through the evaluation. You

can consult the timeframe for your call.

TIMEFRAME						
1. Results of eligibility check (applies only to proposals declared ineligible)	~1/2 month after deadline					
2. Invitations for interviews	2/3 months after deadline					
3. Results of Step 1 for non-retained applicants	~3/4 months after deadline					
4. Step 2 Interviews	5/6 months after dedline					
5. Results of Step 2	~8 months after deadline					
6. Start of Grant	From 8 months onward					

	Starting Grant	Consolidator Grant	Advanced Grant	Synergy Grant	
Call deadline	15 October 2024	14 January 2025	28 August 2025	6 November 2024	
Budget million EUR²³ (estimated number of grants)	751 (483)	719 (354)	683 (276)	500 (48)	
Planned dates to inform applicants after each step	5 May 2025 22 August 2025	18 July 2025 12 December 2025	30 January 2026 12 June 2026	14 April 2025 15 August 2025 27 October 2025	
Indicative date for signature of grant agreements	21 December 2025	12 April 2026	17 November 2026	24 March 2026	

Final Considerations

- Plan your application (STG, CoG, AdV or SyN)?
- Be aware on eligibility and future restrictions to applications
- Be ambitious and 'daring'; panels instructed to seek out frontiers research
- Grab interest and attention of readers/ reviewers, you must convince them
- Remember that Part B1 will be seen by 'generalists' (panel members), provide context
- If you make it to Step 2, reviewers see both B1 and B2
- Ask for help
- Ask for feedback
- If you apply you might be surprised with the outcome, or you can simply reapply (you will receive valuable feedback)
- Do not include unnecessary partners and collaborators; it is not supposed to be a 'consortium'



