ICREA

IFAE

Institut de Física
d'Altes Energies

EXCELENCIA
SEVERO
OCHOA

bist

Director's notes

M. Martinez



IFAE all-hands, IFAE, Nov 2026

Director’s vision

In some selected items

- IFAE in Numbers
- New Organisation
- CERCA excellence matrix
- Research Program and Priorities
- UAB & Institutional Relations
- Gender Balance
- Scientific Personnel
- Funds & Sustainability
- Technical Division
- Support to project
- Spaces & Scientific Life

PERSONNEL
IN 2025

EXPERIMENTAL DIVISON

29	30	59
FACULTY	POST DOCS	PHDS

THEORY DIVISON

16	11	12
FACULTY	POST DOCS	PHDS

TECHNICAL DIVISON

22	30
	PIC

RESEARCH SUPPORT

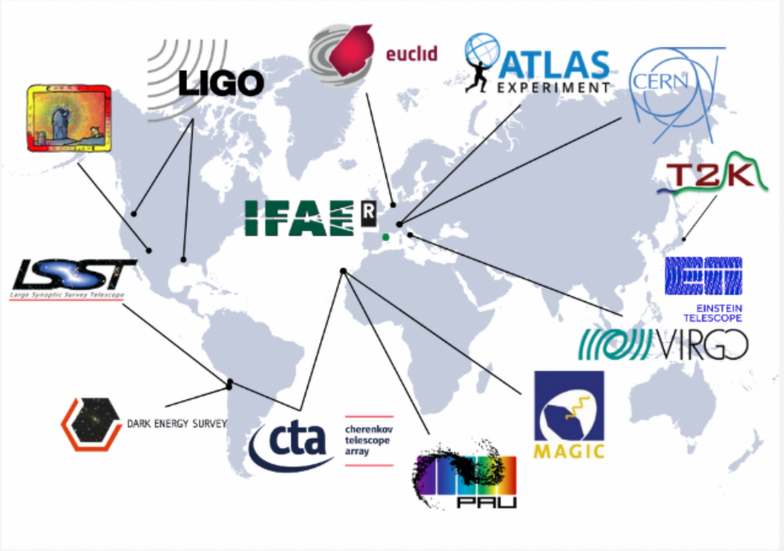
25

234

PROJECTS
IN 2025

81	19	21
MINISTERIO DE CIENCIA, INNOVACIÓN Y UNIVERSIDADES (MCINU)	EUROPEAN COMMISSION	AGÈNCIA DE GESTIÓ D'AJUTS UNIVERSITARIS DE RECERCA (AGAUR)

INTERNATIONAL COLLABORATIONS



INSTITUTIONAL ACTIVITIES
IN 2025

SCIENTIFIC OUTPUT IN 2025

373	87 %	5.4
NUMBER OF INDEXED JOURNAL ARTICLES	ARTICLES IN FIRST QUARTILE JOURNALS*	AVERAGE JOURNAL IMPACT FACTOR (IF)*

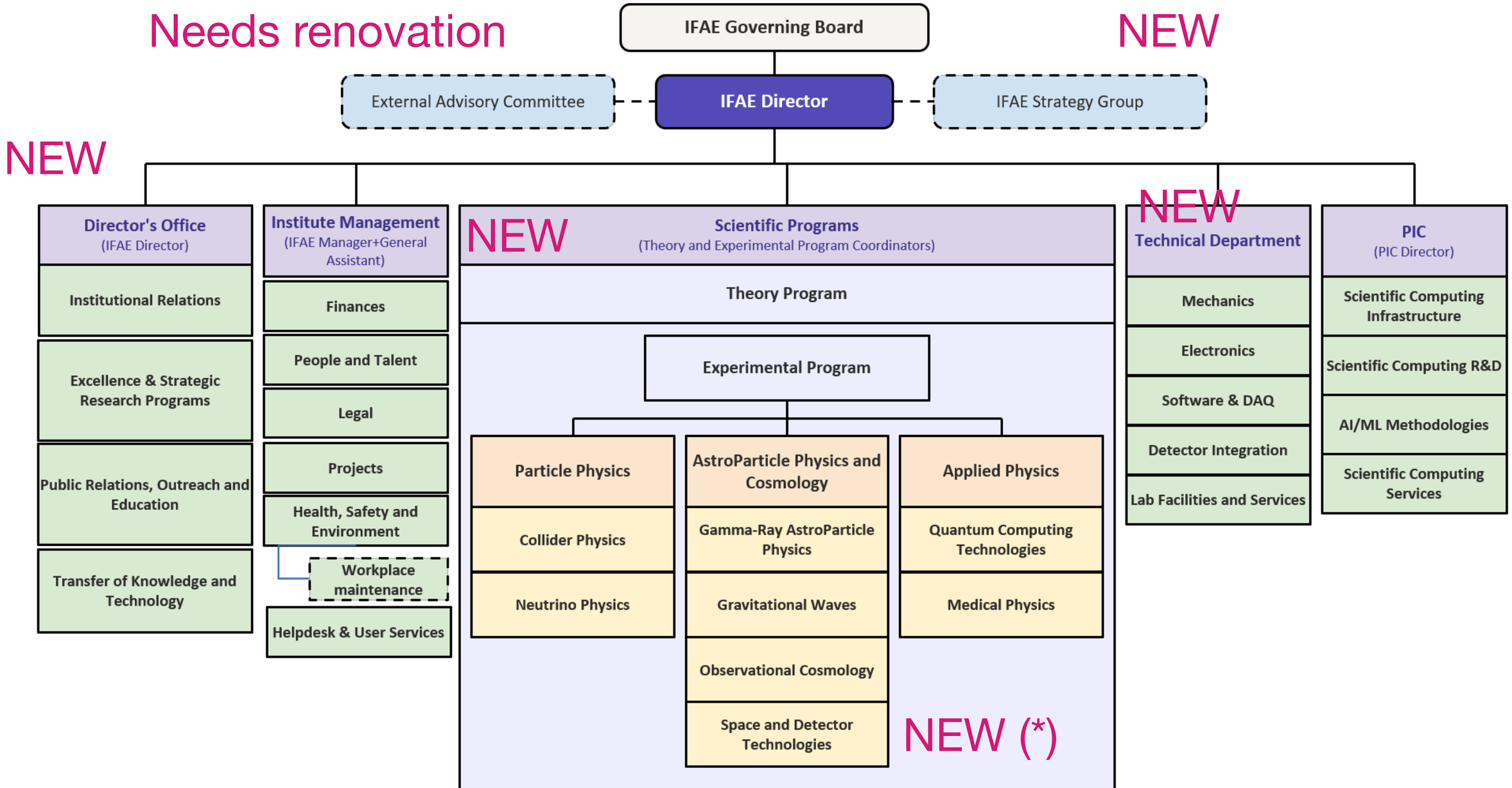
TECHNOLOGY TRANSFER
IN 2025

The Knowledge and Technology Transfer (KTT) unit at IFAE continued to drive high-impact innovation in 2025, reaching significant milestones in the valorization and commercialization of IFAE technologies, mainly in the quantum computing and medical imaging domains. IFAE’s spin-offs successfully scaled by means of an investment round closing and several convertible loan signatures, as well as the launch of Europe’s first multimodal quantum infrastructure in Barcelona.

2025 TECH. TRANSFER OUTPUT AT IFAE

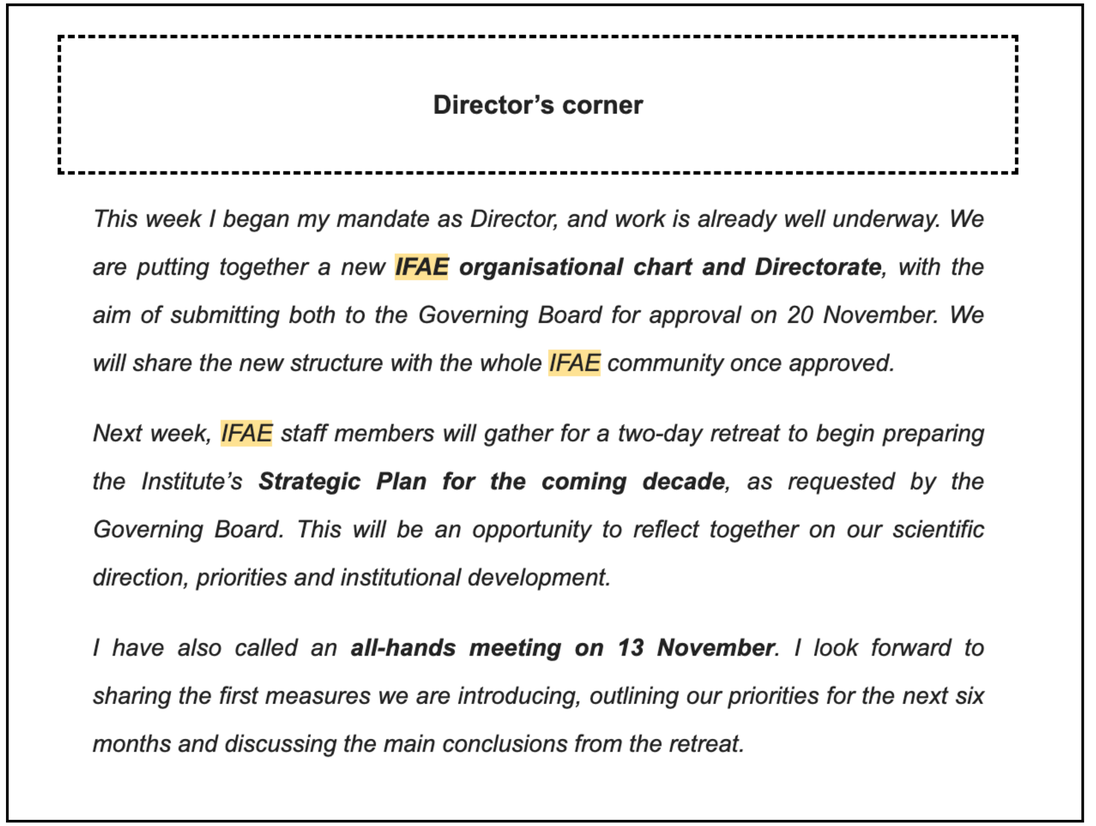
€150,000	117k€
IN PUBLIC FUNDS AWARDED FOR TECHNOLOGY VALORIZATION	IN TECHNICAL SERVICES INVOICED TO PUBLIC AND PRIVATE ENTITIES
€13M+	**1**
IN PUBLIC AND PRIVATE INVESTMENT AND CAPITAL INCREASES SECURED BY IFAE SPIN-OFFS.	NEW EU PATENT APPLICATION FILED FOR MULTIMODAL SPECTRAL NUCLEAR MEDICINE.
1	**4**
MAJOR TECHNOLOGY INFRASTRUCTURE LAUNCHED BY QILIMANJARO’S SPIN-OFF (QUANTUM DATA CENTER IN BARCELONA 22@).	IFAE RESEARCHERS TRAINED IN ENTREPRENEURSHIP (BIST/ESADE 'FROM SCIENCE TO BUSINESS' COURSE).

Organization Chart



Communicate with your Director

- **I would like to define two new clear channels of direct communication with IFAE people**
  - **Weekly Director's corner in the IFAE news**
  - **All newcomers will pay a visit to the Director's Office during her/his first week at IFAE … for an informal and relax chat**
- **Plus regular meetings with different "communities"**
  - **ECS, PIs, TD, Admin**
- **All hands meetings as events require**



Director's corner

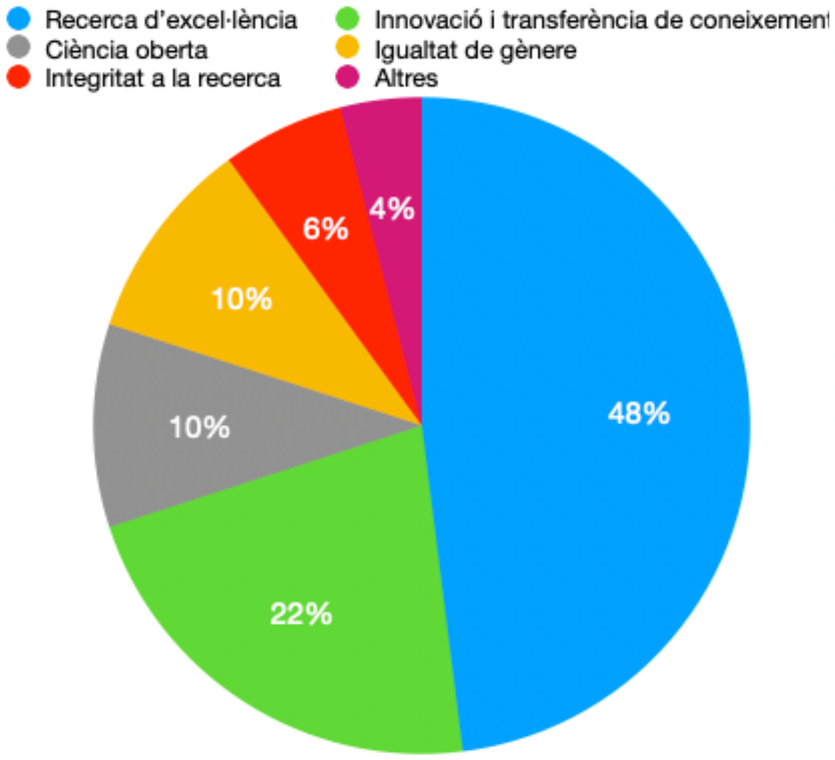
This week I began my mandate as Director, and work is already well underway. We are putting together a new ***IFAE organisational chart and Directorate****, with the aim of submitting both to the Governing Board for approval on 20 November. We will share the new structure with the whole IFAE community once approved.*

Next week, IFAE staff members will gather for a two-day retreat to begin preparing the Institute's ***Strategic Plan for the coming decade****, as requested by the Governing Board. This will be an opportunity to reflect together on our scientific direction, priorities and institutional development.*

I have also called an ***all-hands meeting on 13 November****. I look forward to sharing the first measures we are introducing, outlining our priorities for the next six months and discussing the main conclusions from the retreat.*

Excellence according to CERCA

Indicadors



1. Recerca d'excel·lència – Pes bloc: 48%

Indicador	Pes indicador
ICREA	9%
Postdocs	2%
ERC	11%
Ingressos competitius	33%
Projectes Europeus i Grans Projectes participats	6%
Projectes Europeus i Grans Projectes liderats	11%
Tesis llegides	6%
Publicacions 1%	11%
Publicacions 10%	11%

2. Innovació i transferència de coneixement – Pes bloc: 22%

Indicador	Pes indicador
Ingressos no competitius (contractes)	25 %
Ingressos per llicències i patents	16 %
Ingressos per spin-offs	7 %
Patents llicenciades/transferides	16 %
Spin-offs creades	10 %
Spin-offs creades amb activitat 5 anys després de la seva creació	10 %
Tesis llegides amb menció industrial	5 %
ERC PoC	4 %
EIC Liderats	5 %
EIC Participats	2 %

3. Ciència oberta – Pes bloc: 10%

Indicador	Pes indicador
% publicacions en accés obert	38 %
Repositori institucional de dades de recerca obert creat i amb algun dataset	31 %
Política de ciència oberta aprovada	31 %

4. Igualtat de gènere – Pes bloc: 10%

Indicador	Pes indicador
Publicacions liderades per dones del centre (topall 50 %)	40 %
Finançament competitiu liderat per dones del centre (topall 50 %)	40%
% dones en Scientific Advisory Board (topall 50 %)	20 %

5. Integritat a la recerca – Pes bloc: 6%

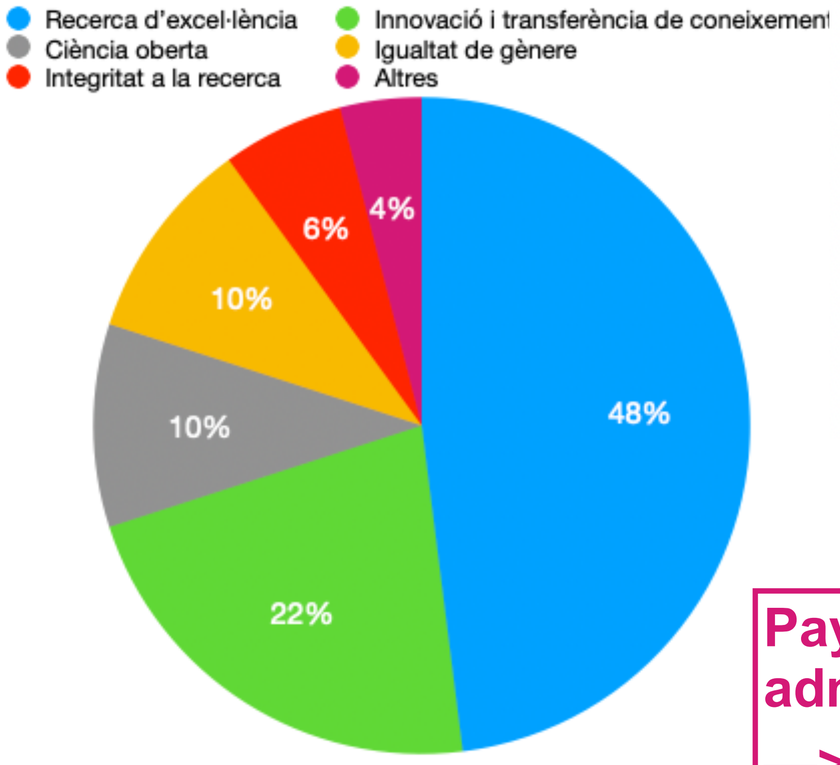
Indicador	Pes indicador
Codi d'integritat a la recerca publicat, amb comitè de seguiment de casos	50 %
Procés d'acollida que inclou temes d'integritat a la recerca	50 %

6. Altres– Pes bloc: 4%

Indicador	Pes indicador
Equilibri territorial	75 %
Logo Excellence HR4R	25 %

Excellence according to CERCA

Indicadors



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Ingressos per spin-offs	7 %
des	16 %
	10 %
at 5 anys	10 %
dustrial	5 %
	4 %
	5 %
	2 %

All our actions will be driven by those indicators and the need to renovate the Severo Ochoa Excellence Stamp

3. Ciència oberta – Pes bloc: 10%

Indicador	Pes indicador
% publicacions en accés obert	38 %

4. Igualtat de gènere – Pes bloc: 10%

Indicador	Pes indicador
Publicacions liderades per dones del centre (topall 50 %)	40 %
ançament competitiu liderat per dones centre (topall 50 %)	40%
dones en Scientific Advisory Bo (topall 50 %)	

5. Integritat a la recerca – Pes bloc: 6%

Indicador	Pes indicador
Codi d'integritat a la recerca publicat, amb comitè de seguiment de casos	50 %
Procés d'acollida que inclou temes d'integritat a la recerca	50 %

Pay attention to all the emails from administration — mandatory —

—> Sessió d' Integritat i Bones Pràctiques en la Recerca | 17 de novembre

—> Tutorials for PIs..

—> …..

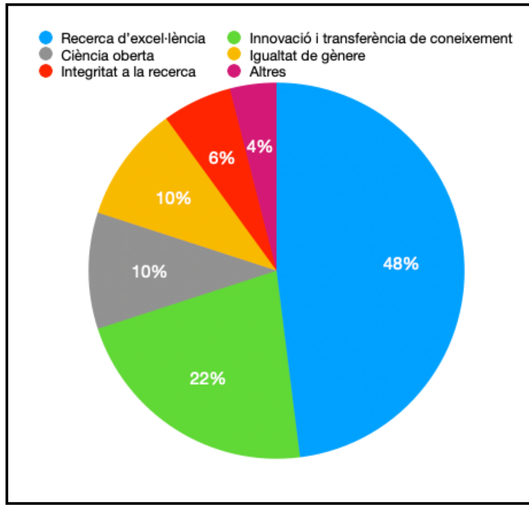


My vision *Research Program and Priorities*

- **The current standing of IFAE is the result of bold strategic choices in research lines and major experimental programmes that require long-term commitments.**

- Given its size, **the Institute is now highly diversified** across multiple research areas —sustaining excellence across all lines without sufficient critical mass and strategic focus may become challenging and could require corrective or consolidating measures — **no new research lines in the next four years**

    - Further consolidate the recent lines — Gravitational Waves and Quantum Computing Technologies
    - Guarantee success in the long-standing existing programmes (HL-LHC, CTA, LSST)
    - **Solid grounds for the next BIG projects** : Einstein Telescope and Future Circular Collider @ CERN

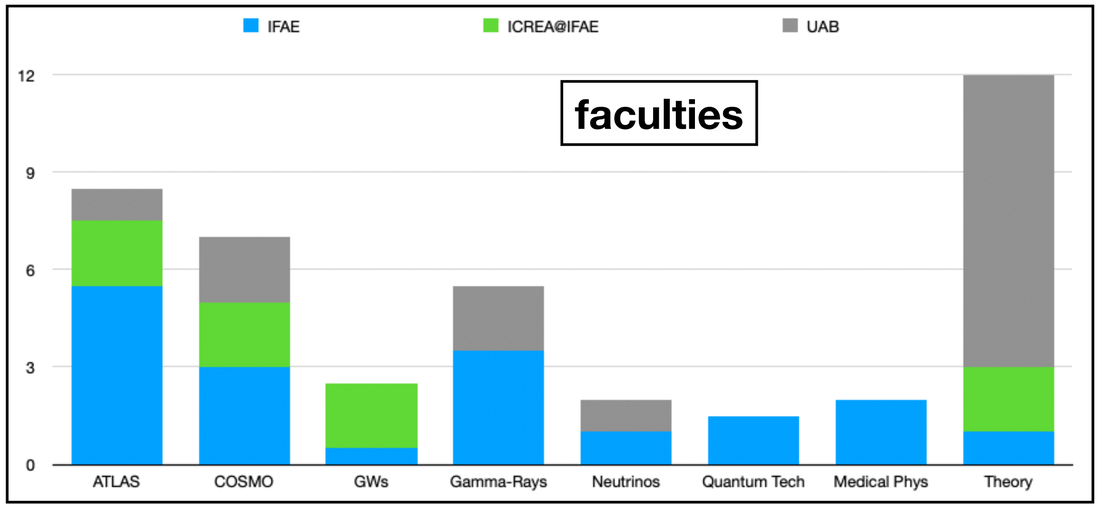


- **Enhance the IFAE applied physics area** — preserving the Institute's core mission in fundamental science.

    - Boost the Medical Physics area
    - Better alignment with EC roadmap and priorities
    - Boost KTT officer — create new Spin-offs / **more patents**

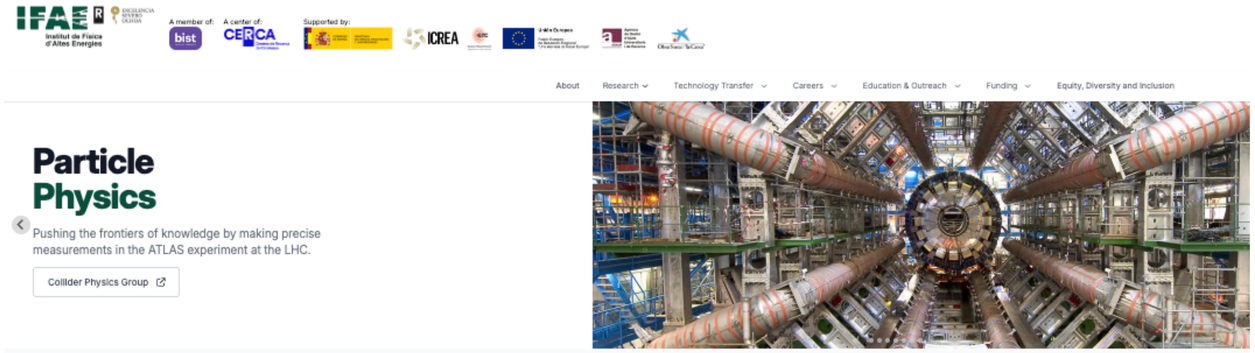
- **Strengthen the Outreach and Communications Office**

    - Still **room for improvement in IFAE's web** and outreach portfolio
    - IFAE should **become a leading reference for the public domain**



How you project yourself

*Die **Außendarstellung** der IFAE-Webseite kann verbessert werden*







This is the level we should maintain all the time..



Will require investment and outsourcing services

— Annual reports

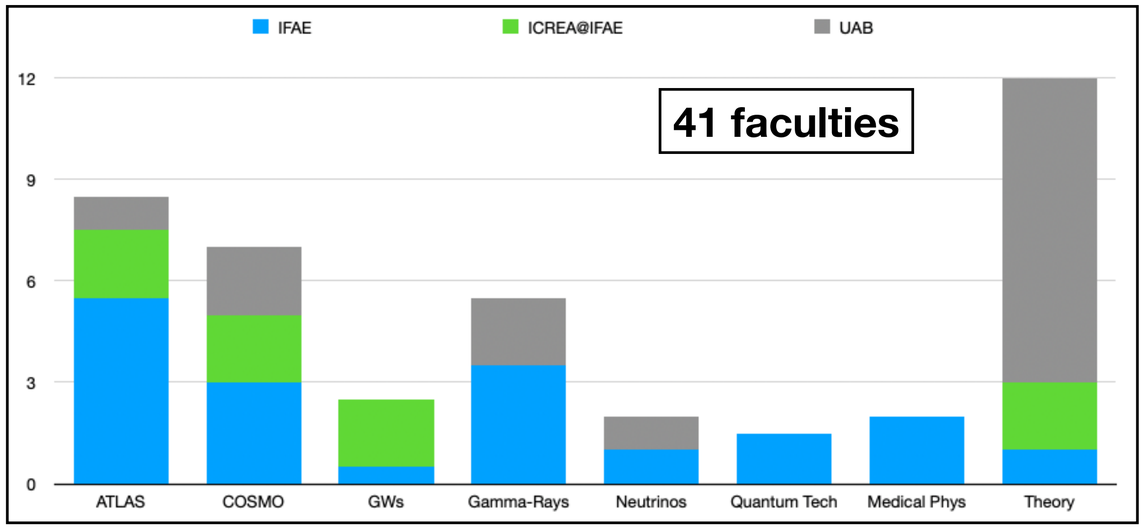
— Updated pages

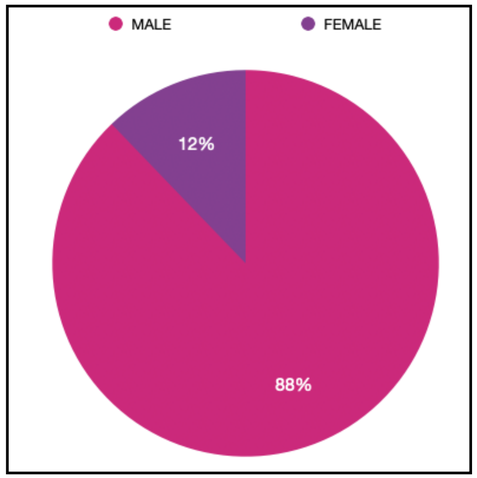
My vision *UAB & Institutional Relations & Gender Balance*

- A fluid, transparent, and constructive relationship with the UAB and its Phys. Dept. is absolutely crucial and a priority — a relationship of trust and close communication to promote synergies, develop joint initiatives at multiple levels.
  - **UAB constitutes 37% of the Sc. staff**

- Maintain an excellent relationship with ICREA
  - **ICREA constitutes 20% of the Sc. staff**

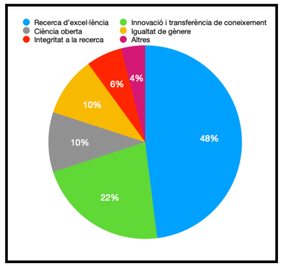
- Some groups lack ICREAs / UAB staff
  - **It has to be corrected**



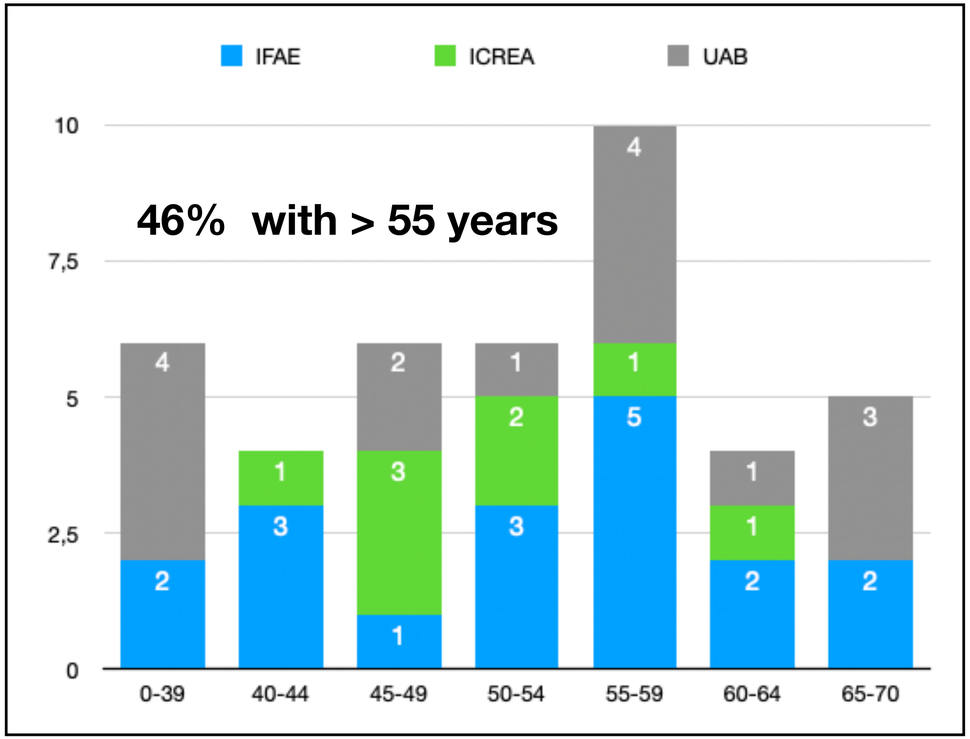


The gender imbalance among staff is unacceptable

IFAE+ICREA@IFAE is 15%
IFAE+ICREA@IFAE+UAB is 12%



I will impose a very strong affirmative action policy in IFAE to improve the numbers

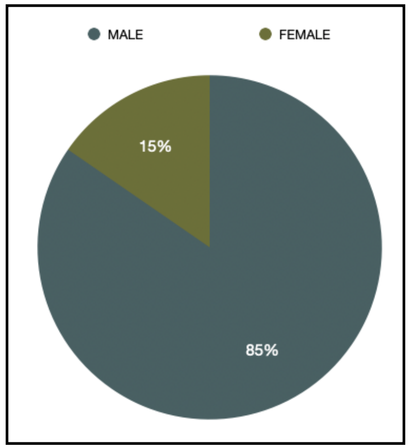


My vision

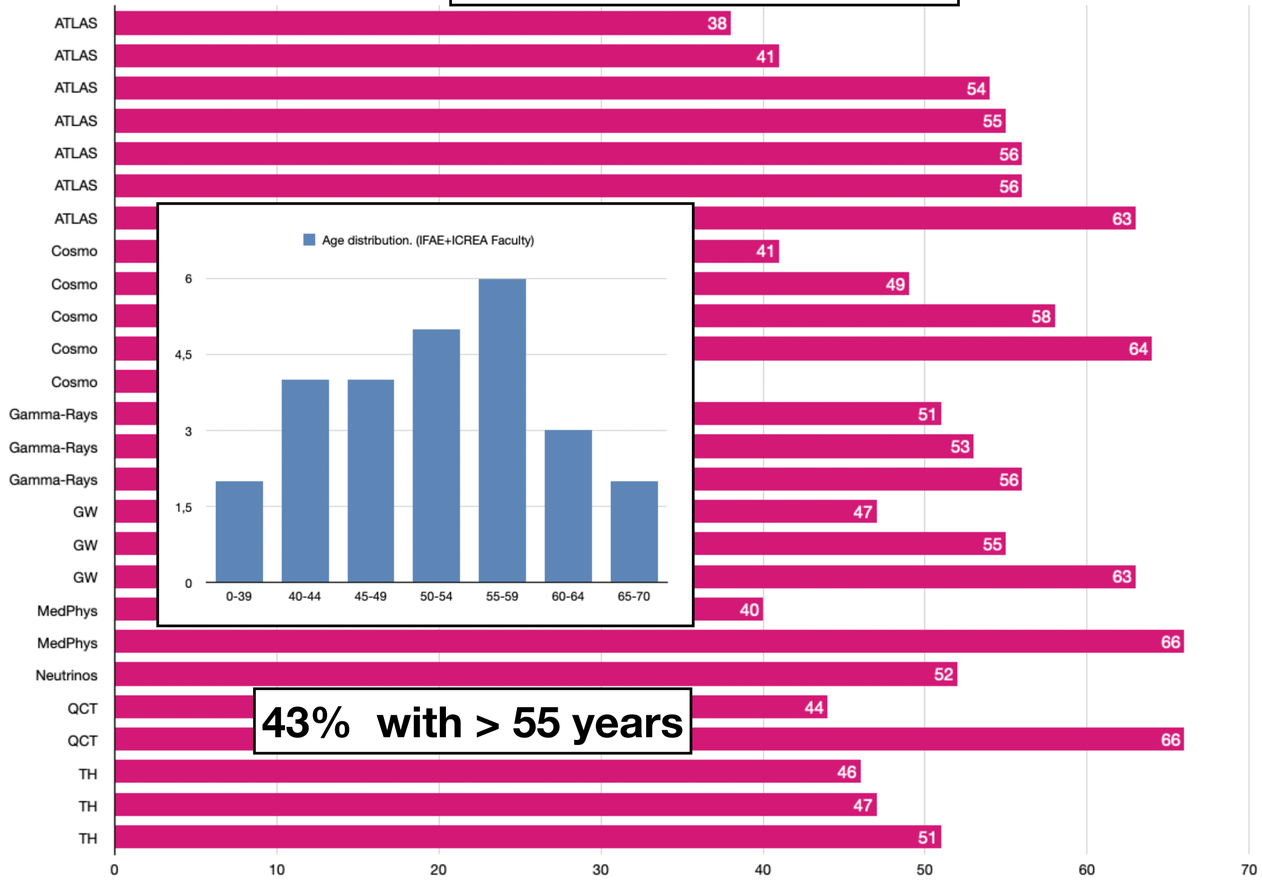
Generational Replacement (IFAE only perspective)

- IFAE has a **well-defined roadmap for the next decade.**
- **Career path of the IFAE staff is a central point of attention — redefinition of levels and promotions**
- **Will come with annual (soft) reviews of performance…**
- **The age profile of the Institute's scientific staff remains a point of attention** given that, within the next few years, a fraction will approach retirement age.
- I will initiate a frank discussion with its stakeholders to **develop a concrete and sustainable medium-term plan** for the renewal of the scientific staff over the next five to ten years.
- IFAE should **actively seek outstanding candidates** with strong international visibility and leadership potential, **complementing our program and bringing ERC grants.**
- The next four years will be crucial for **correcting the long-standing gender imbalance** within the scientific staff of IFAE.



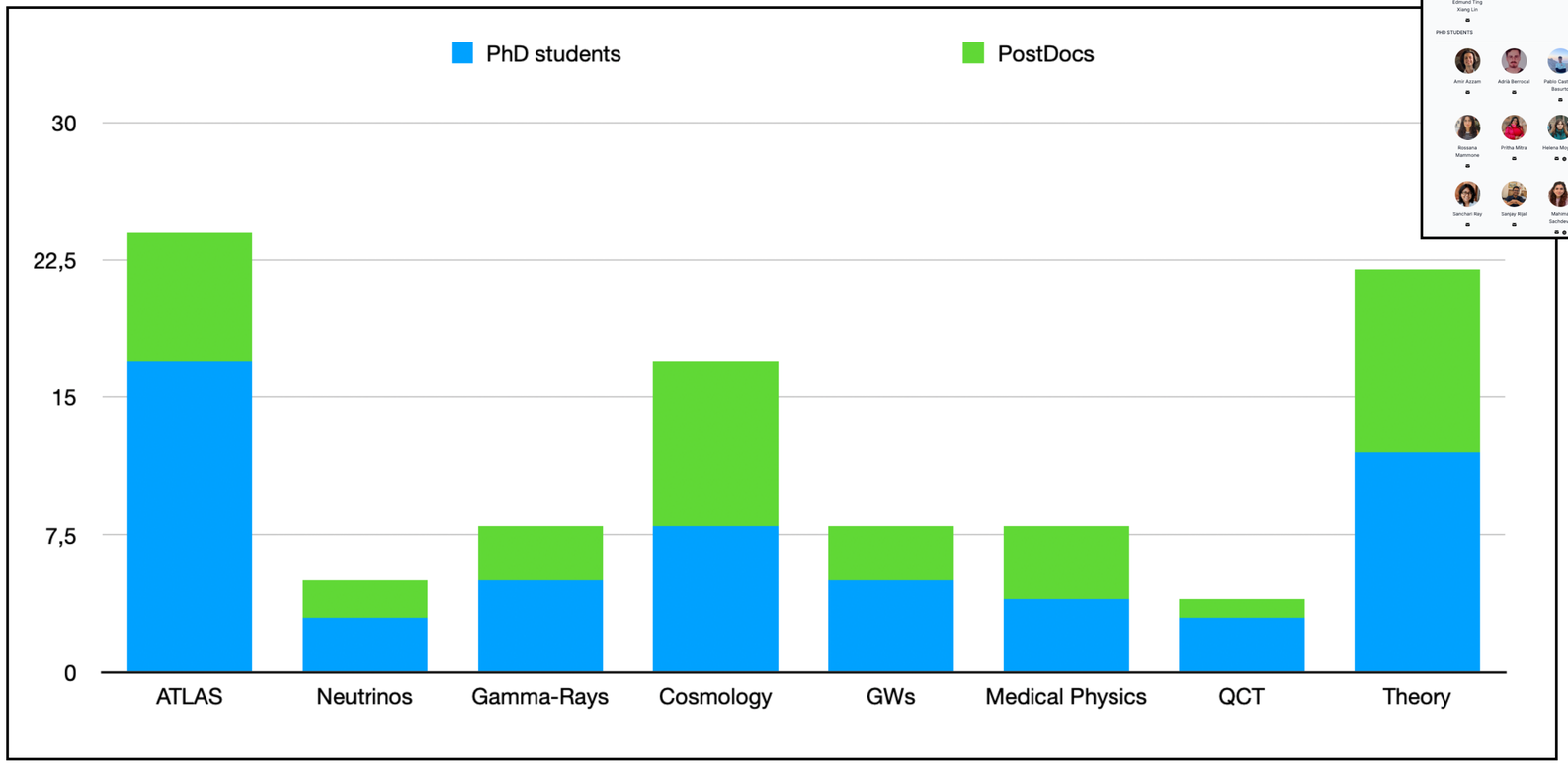


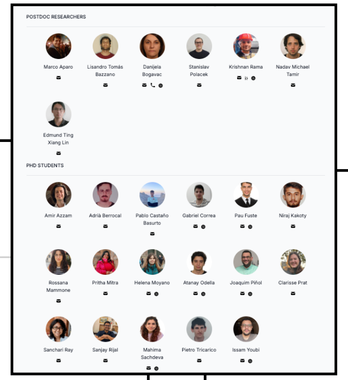
26 IFAE+ICREA faculties

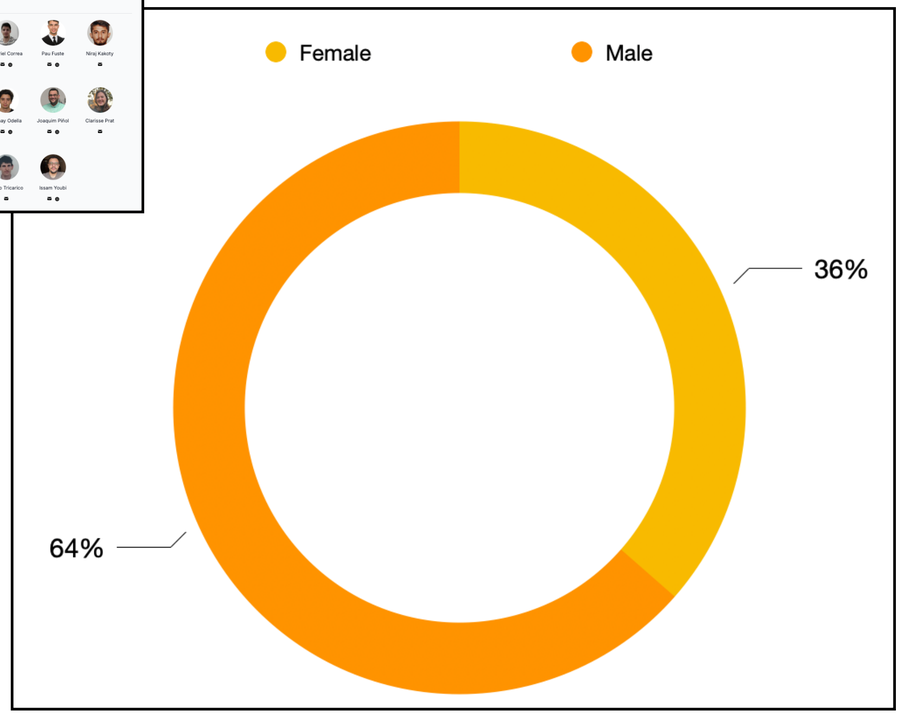


43% with > 55 years

Our Young Scientists







You are a large and dynamic community that deserves the full attention of the Management — regular meetings with the Director & a reinforced supervision and mentorship

I welcome the creation of the ECS Board with two representatives

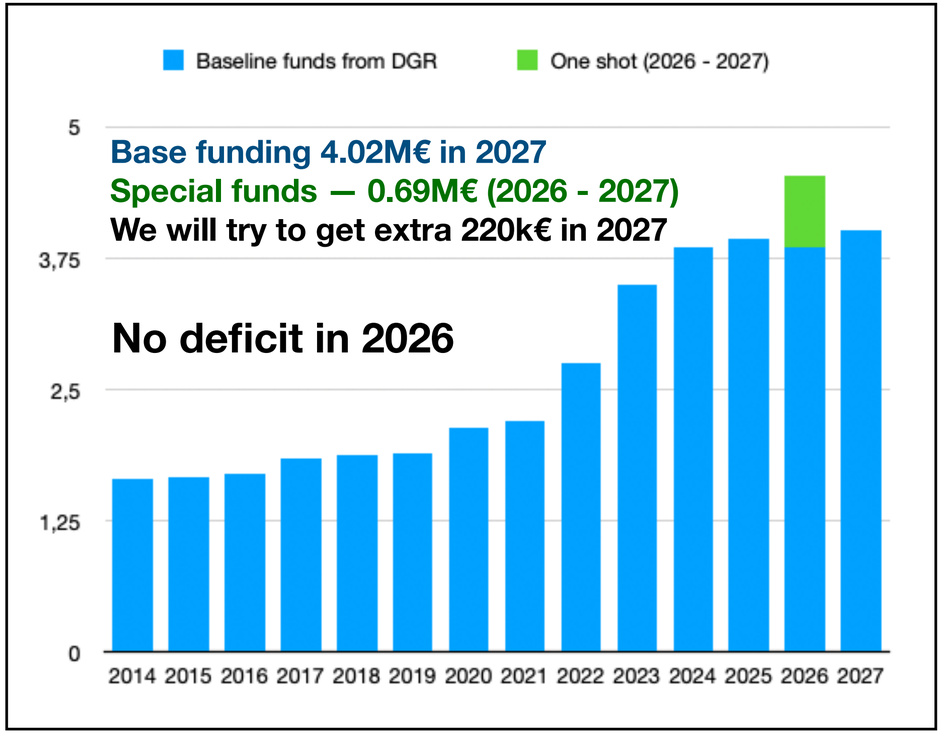
(Similar of what exists already in any big experimental collaboration)

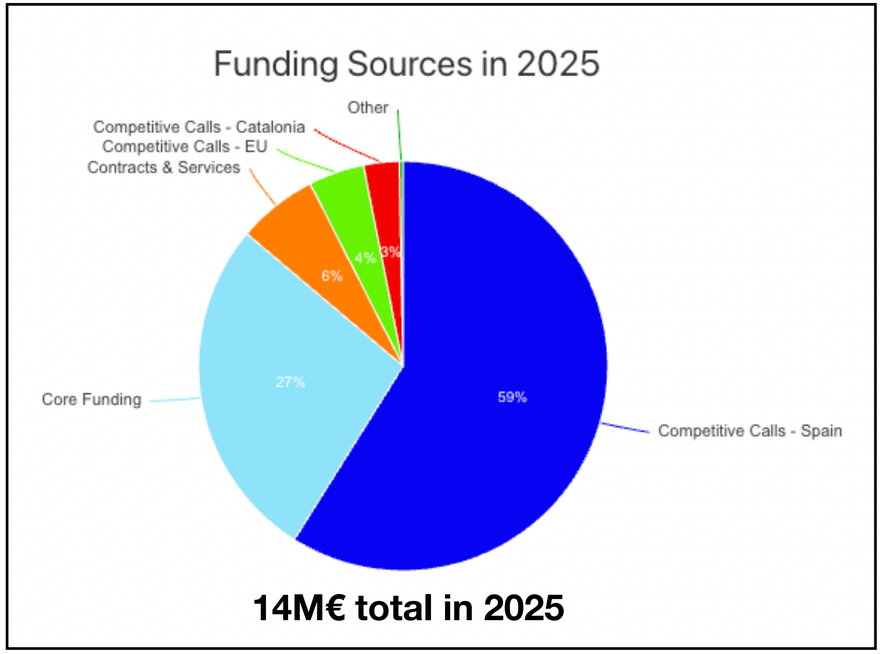
Without forgetting you are scientists taking care of your careers as scientists in a rather competitive and exclusive international environment that only accepts excellence

My vision

Financial Sustainability

- **A key priority of the Director**, in close collaboration with the new head of administration of IFAE, will be to **ensure the effective functioning and long-term sustainability of the Institute.**
  - carefully planned annual budget, the implementation of a clear and robust long-term human resources strategy, and the rigorous execution and monitoring of research grants.
- **Despite significant efforts by the Generalitat** to increase its baseline funding in recent years, **the Institute continues to show underlying fragility** in its capacity to cover structural needs.
  - need for **further increases in stable baseline** funding — we got one shot in 2026
  - together with a **broader diversification of funding sources — more ERCs**
- **A sustained increase in the success rate for securing competitive European research funding** — thereby increasing institutional income through project overheads — **will contribute significantly to strengthening the financial stability of IFAE**
  - **consolidation and expansion of European funding a strategic priority.**
  - Applying for ERC grants should become a priority
  - PO should be reinforced to help in the preparation of ERCs and the management of them
- I would consider the **strengthening of applied physics activities at IFAE to be a strategic priority**, promoting a **gradual expansion toward more applied research** while fully preserving the Institute's core mission in fundamental science.
  - More and closer interactions with other BIST and CERCA centres
- **align** its activities, whenever possible, **with the major scientific and technological priorities identified by the European Commission roadmap for the coming decade.**





My vision

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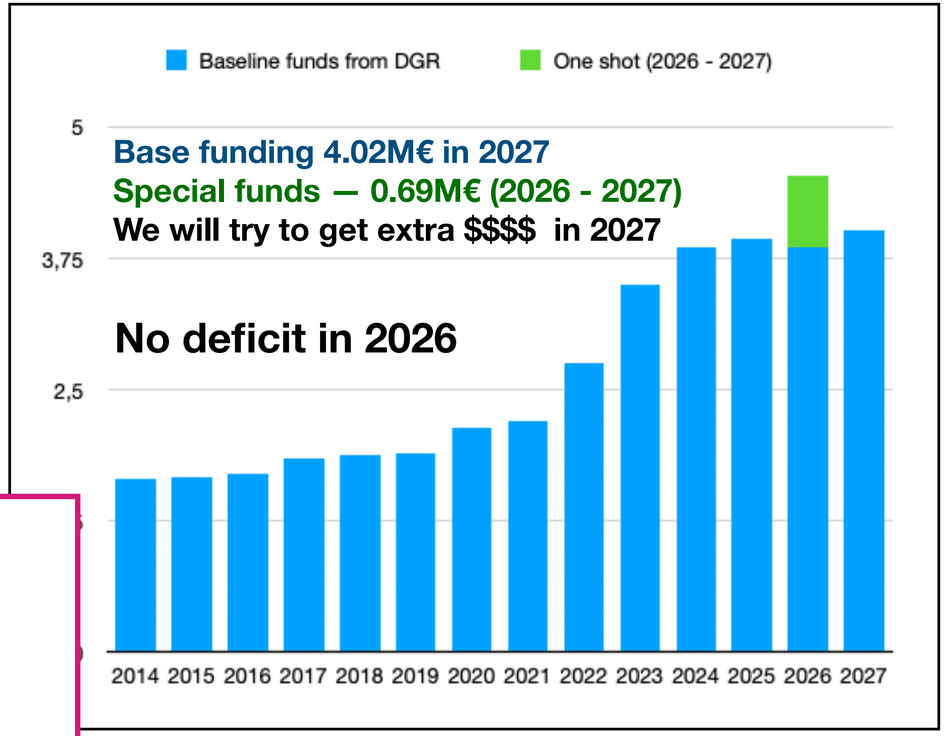
Increasing EU funds is instrumental for us — apply to ERCs

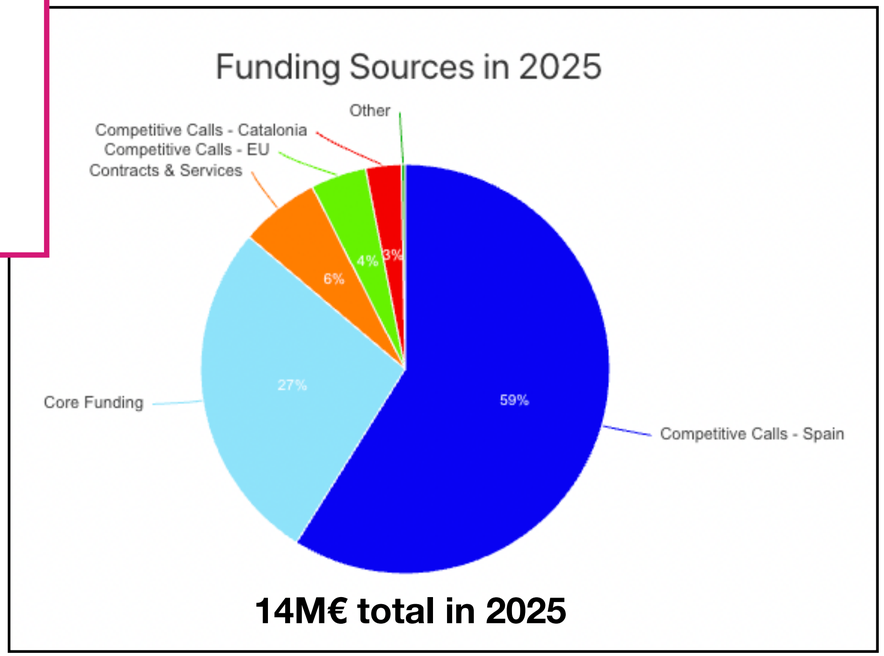
IFAE is making a heavy use of overheads to support the groups

- **Already in 2026 we will use about 1/3 to co-fund PhDs/PostDocs**
- **We are also using significant funds to cover TD personnel**

Applying for EU funds should be actively pursued by ECS as well

- I would consider the **strengthening of applied physics activities at IFAE to be a strategic priority**, promoting a **gradual expansion toward more applied research** while fully preserving the Institute's core mission in fundamental science.
  - More and closer interactions with other BIST and CERCA centres
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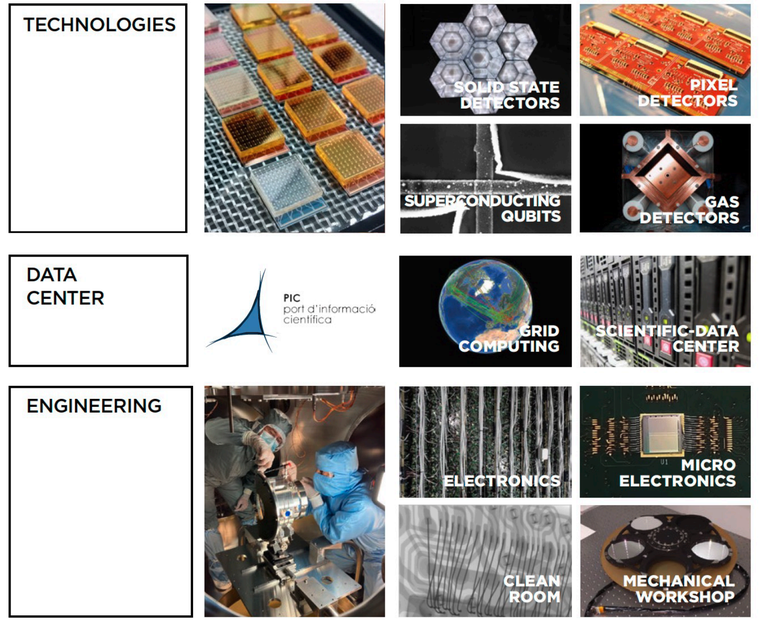




My vision

Office and Workshop Spaces and notes on Technical Division

- IFAE occupies several buildings with offices on the UAB campus, as well as another building housing first-class laboratories.
- IFAE also hosts the Port d'Informació Científica (PIC)
- Maintaining IFAE's excellence requires preserving a strong, efficient, and highly functional technical services division — including PIC — together with the continued development of the Institute's laboratory infrastructures.
- The **technical division** of IFAE currently **shows significant signs of fragility** due to a lack of space, the obsolescence of part of its infrastructure, and insufficient human resources.
- At present, **a large fraction of the technical staff at IFAE is funded primarily through soft, project-based resources**, and **the technical division lacks a well-established career path**. As a result, expert engineers are leaving the Institute, in some cases taking with them valuable know-how and unique capabilities built through many years of research, development, and investment.
- **I will initiate an open discussion with stakeholders to design a medium-term consolidation plan for the Institute's technical services.** I will also **promote the creation of a new position of Chief Engineer and Technical Coordinator.**
  - A senior engineer with demonstrated experience — **evaluating the current structure and implementing the measures necessary to establish efficient, sustainable, and forward-looking technical services.**

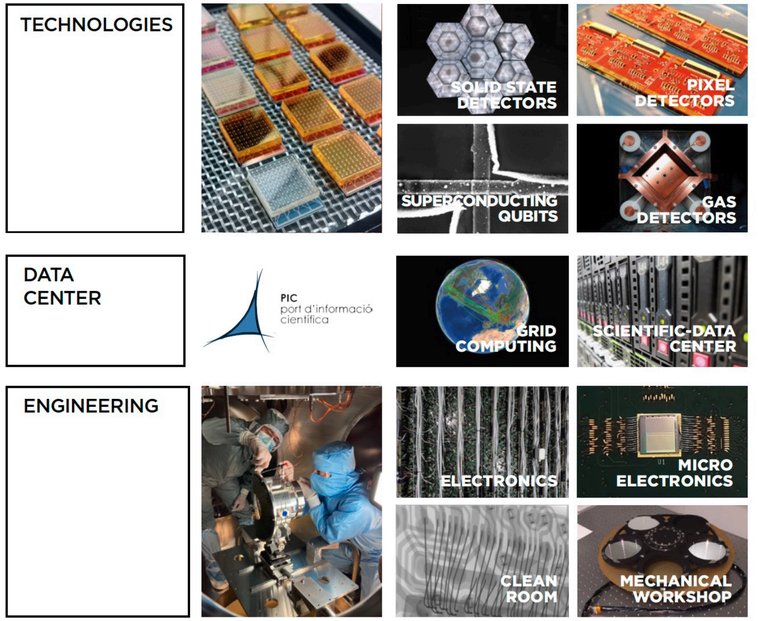




My vision

Office and Workshop Spaces and notes on Technical Division

- IFAE occupies several buildings with offices on the UAB campus, as well as another building housing first-class laboratories.
- IFAE also hosts the Port d'Informació Científica (PIC)
- **The career path of TD will become a point of attention**
- **Thanks to SO and infrastructure funds, together with BOE funds specifically allocated to ET, we will renew and upgrade the common equipment in the Lab including clean room extensions.**
- **Using the remaining 2026 funds, we will launch a preventive maintenance campaign covering the Lab's equipment.**
- **We will also carry out a comprehensive technical audit of all Lab services.**
  - A senior engineer with demonstrated experience — **evaluating the current structure and implementing the measures necessary to establish efficient, sustainable, and forward-looking technical services.**





My vision

New IFAE Building(s)

- **The facilities, common areas and office spaces of IFAE do not do justice to the Institute** and fall far short of reflecting the excellence for which it is recognised.

- **The lack of sufficient and coherent space** for offices and laboratories at IFAE **is an endemic problem** that must be definitively addressed.

  - IFAE staff remain **dispersed across multiple locations** on campus

  - The l**aboratories and technical buildings have reached full capacity and are becoming a major limiting factor** for the growth of the research groups, the development of their future plans, and their ability to undertake new commitments

- **The vision of establishing a new IFAE building in the ALBA Synchrotron area, in synergy with other institutes on the UAB campus, should continue to be actively pursued** and realised in the near future.

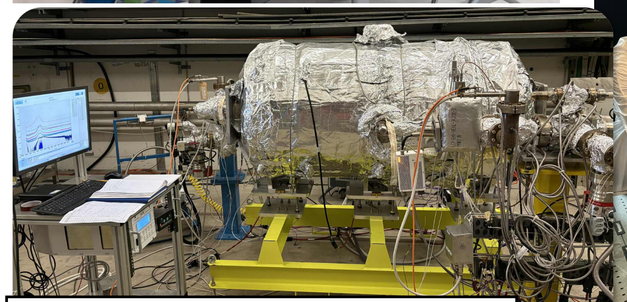
  - I intend to **work in close coordination with CERCA and UAB authorities** to advance this vision.

  - while also **seeking to improve the existing facilities** and exploring additional permanent and temporary solutions on campus.



Renovated office spaces


New labs


UHV and Cryogenics Lab


Advanced Optics


Integration — clean rooms



My vision

New IFAE Building(s)

- **The facilities, common areas and office spaces of IFAE do not do justice to the Institute** and fall far short of reflecting the excellence for which it is recognised.

- **The lack of sufficient and coherent space** for offices and laboratories at IFAE **is an endemic problem** that must be

There is growing pressure to provide additional office space.

At the same time, there is a perception that some offices are currently underoccupied or left unused.

The C5b space will be refurbished before the end of 2026.

A task force will be set up next week to develop a new model for space allocation, with the aim of having a proposal ready by the end of 2026.

authorities to advance this vision.

- while also **seeking to improve the existing facilities** and exploring additional permanent and temporary solutions on campus.

Renovated office spaces





New labs





Advanced Optics

ogenics Lab



Integration — clean rooms



Our dream

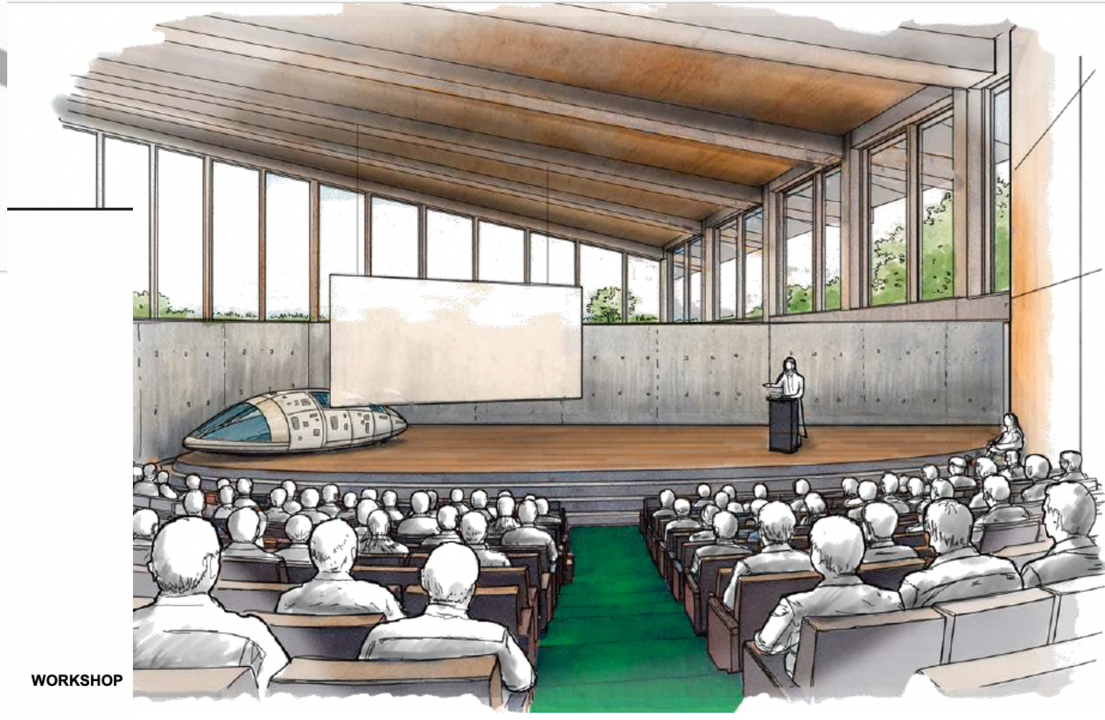
We just need to get the money….



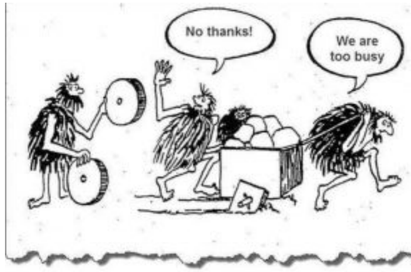






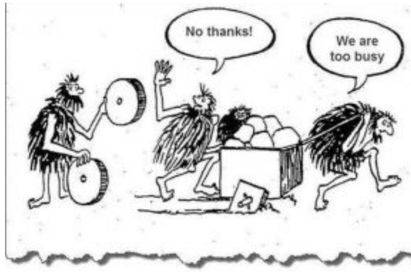


My vision *Administrative support to Research Lines*



- IFAE has faced significant administrative challenges in recent years, **particularly in areas supporting scientific activities and project management**.
  - **structural weaknesses** including insufficient personnel, limited inter-departmental coordination, and the absence of robust, scalable tools and procedures for efficient operation.
- **IFAE still struggles to cope with the growing number of projects** and the efficient management of large-scale EU-funded initiatives.
  - and often **requires Principal Investigators to intervene daily in administrative tasks**, diverting valuable time **away from scientific leadership and research**.
- The recent reorganisation of the administrative management — promoted by CERCA — has helped redirect IFAE toward a more stable path,
  - **substantial work remains necessary** to achieve the standards of excellence expected from a leading international research centre.
- **I will work closely with the new head of administration** to accelerate this transition and strengthen support for research groups.

My vision *Administrative support to Research Lines*



- IFAE has faced significant administrative challenges in recent years, **particularly in areas supporting scientific activities and project management**.
  - **structural weaknesses** including insufficient personnel, limited inter-departmental coordination, and the absence of robust, scalable tools and procedures for efficient
- **The Project Office must be reinforced and become a central pillar of IFAE's administrative structure.**

  This is essential given that approximately 60% of IFAE's funding comes from projects, which are subject to increasingly demanding management, reporting and compliance requirements.

  As in other departments — personnel will be the priority 1
- **ects** and the efficient
- **in administrative**
- **o and research**.
- or



  - **substantial work remains necessary** to achieve the standards expected from a leading international research centre.
- **I will work closely with the new head of administration** to acce and strengthen support for research groups.

My vision

Scientific Life of the Institute

- **Preserving a vibrant scientific atmosphere** and a stimulating, rewarding work environment at all levels of IFAE **will remain a priority** during my mandate as Director
  - promote a **broader portfolio of training and networking opportunities** for both junior and senior researchers, together with a significantly **more ambitious programme of workshops, seminars, and scientific visits.**
  - encourage the **organisation of topical courses** focused on tools and methodologies, **frequent interdisciplinary workshops** aimed at stimulating scientific exchange and **creating synergies across research lines and with other research centres.**
  - further **consolidate the Institute's role as an internationally recognised hub** for new scientific ideas and collaborations.
- One potential **challenge** to these objectives is the (existing) **excessive teleworking**
  - Beneficial for IFAE staff — to support work–life balance and family conciliation
  - but **if not regulated properly may reduce scientific exchange** and lead to inefficiencies, misunderstandings, and a lack of coordination both within and across departments



My vision

Scientific Life of the Institute

More team making activities in the future…..



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  - promote a **broader portfolio of training and networking opportunities** researchers, together with a significantly **more ambitious programme of workshops, seminars, and scientific visits.**

Already happening via SO initiatives — but more training is needed.

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  - furt**ed hub** for new scientific ide

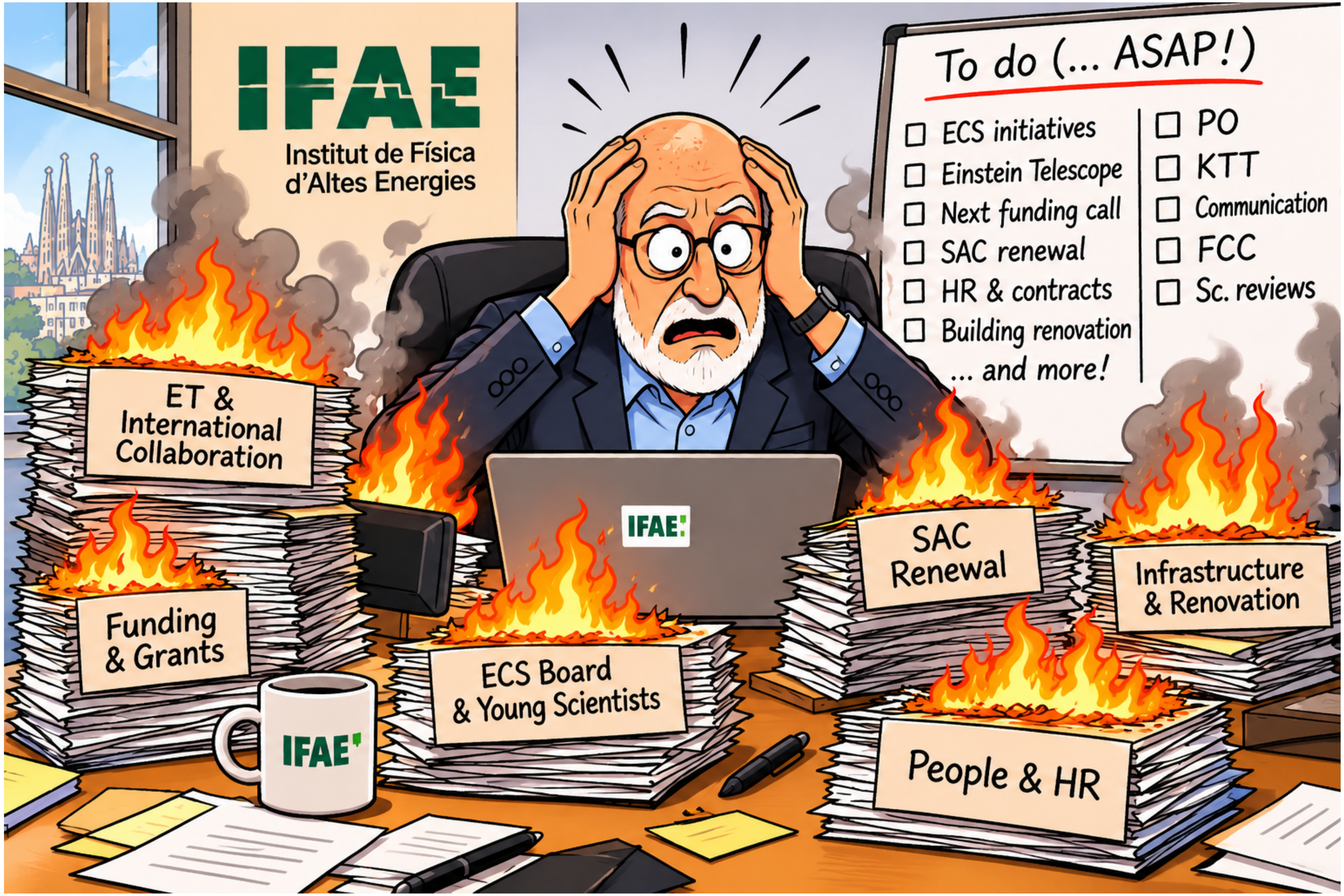
The task force on spaces will also include a revision of teleworking policies separately in the different departments

- One **le**
  - Be**ncil**
  - but **if not regulated properly may reduce scientific exchange** and lead misunderstandings, and a lack of coordination both within and across de

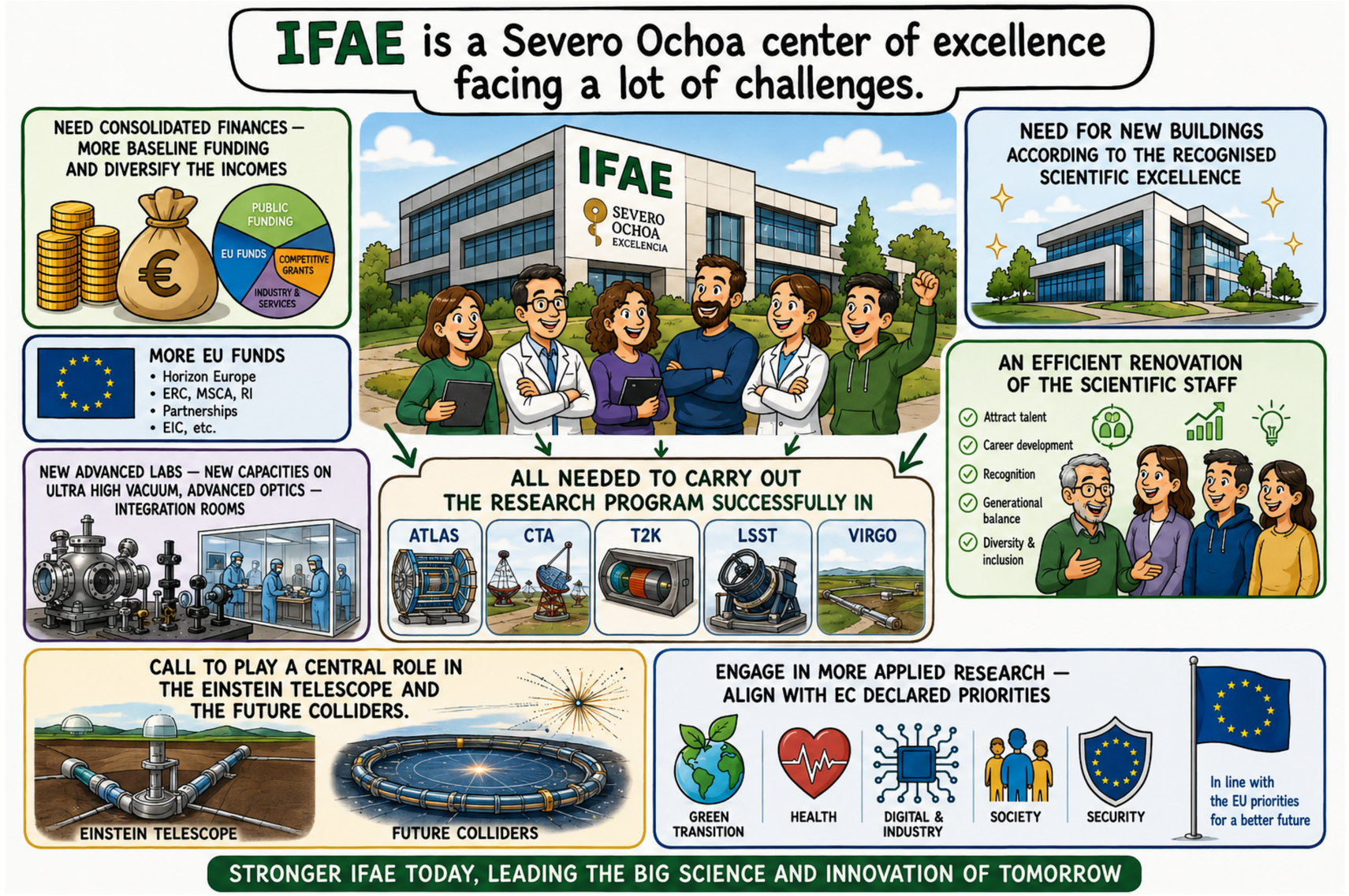
— we might converge into a scenario in which teleworking is moderated with clear rules and a hot desk model implemented



Burning on my table



In summary — *let's work together*



If we combine scientific excellence with international collaboration, sustained investment and a clear commitment to society, IFAE can enter its next chapter stronger, more influential and better equipped than ever to contribute to the future of science and technology in Europe