

# SPANISH SCIENCE INDUSTRY

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ACADEMIA MEETS INDUSTRY

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# Science

The intellectual and practical activity encompassing the systematic study of the structure and behaviour of the world through observation and experiment.











SCIENCE INDUSTRY is the economic sector which includes the companies devoted to the design, engineering, construction, updating and keeping of scientific research facilities, its equipment and other related instruments



- In the Edge of the Technology
- Public-Private Collaboration
- High Added Value
- Mostly International (>90 %)
- Highly Competitive





A close-up photograph of a person's hand holding a bright orange sticky note. The note is held in the center of the frame, and the word "WHY?" is written on it in bold, black, hand-drawn capital letters. The background is dark and out of focus, showing a person's torso and arms in a dark shirt. The lighting is soft, highlighting the texture of the hand and the vibrant color of the note.

WHY ?



120 m

100 m

80 m

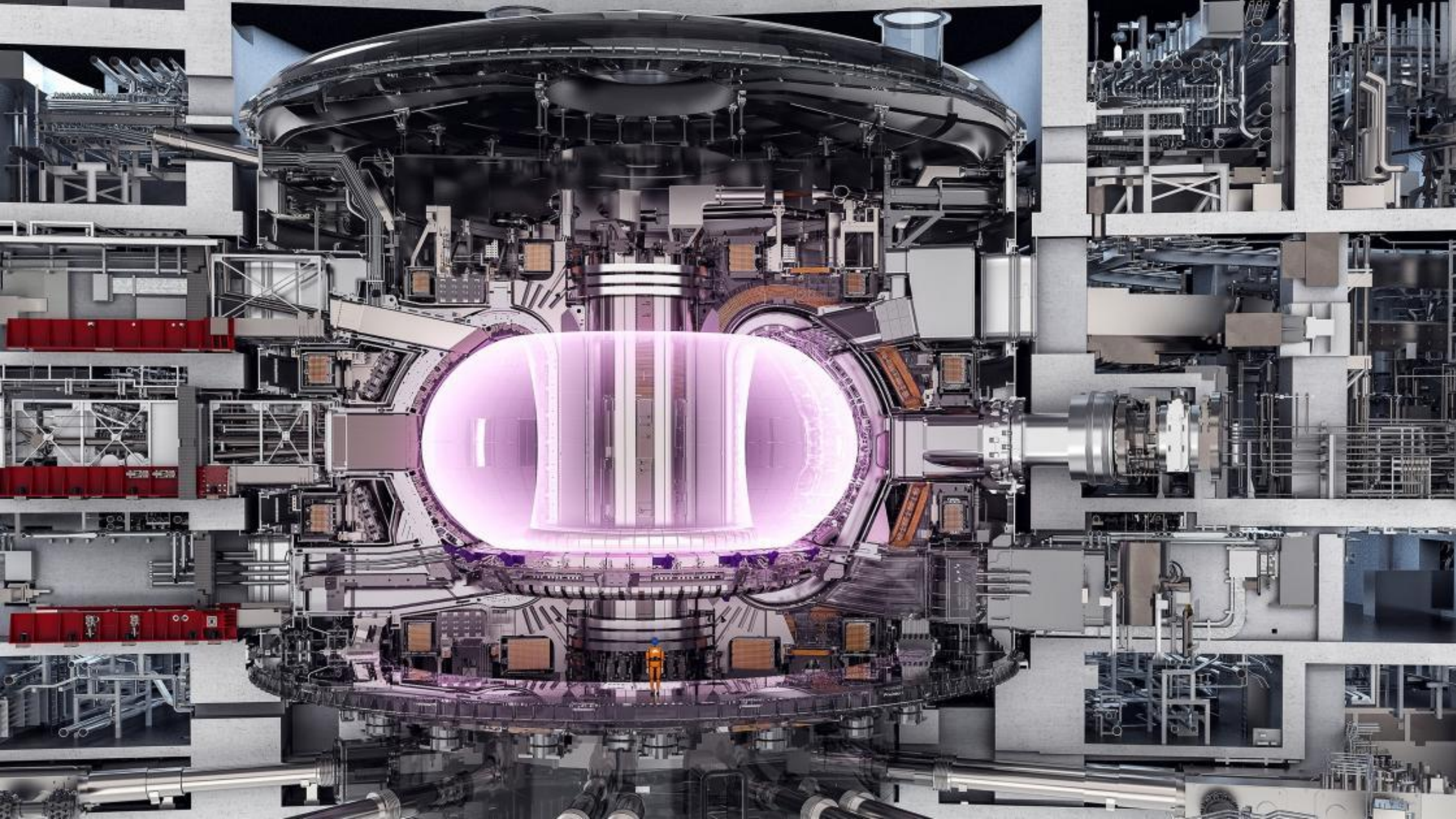
60 m

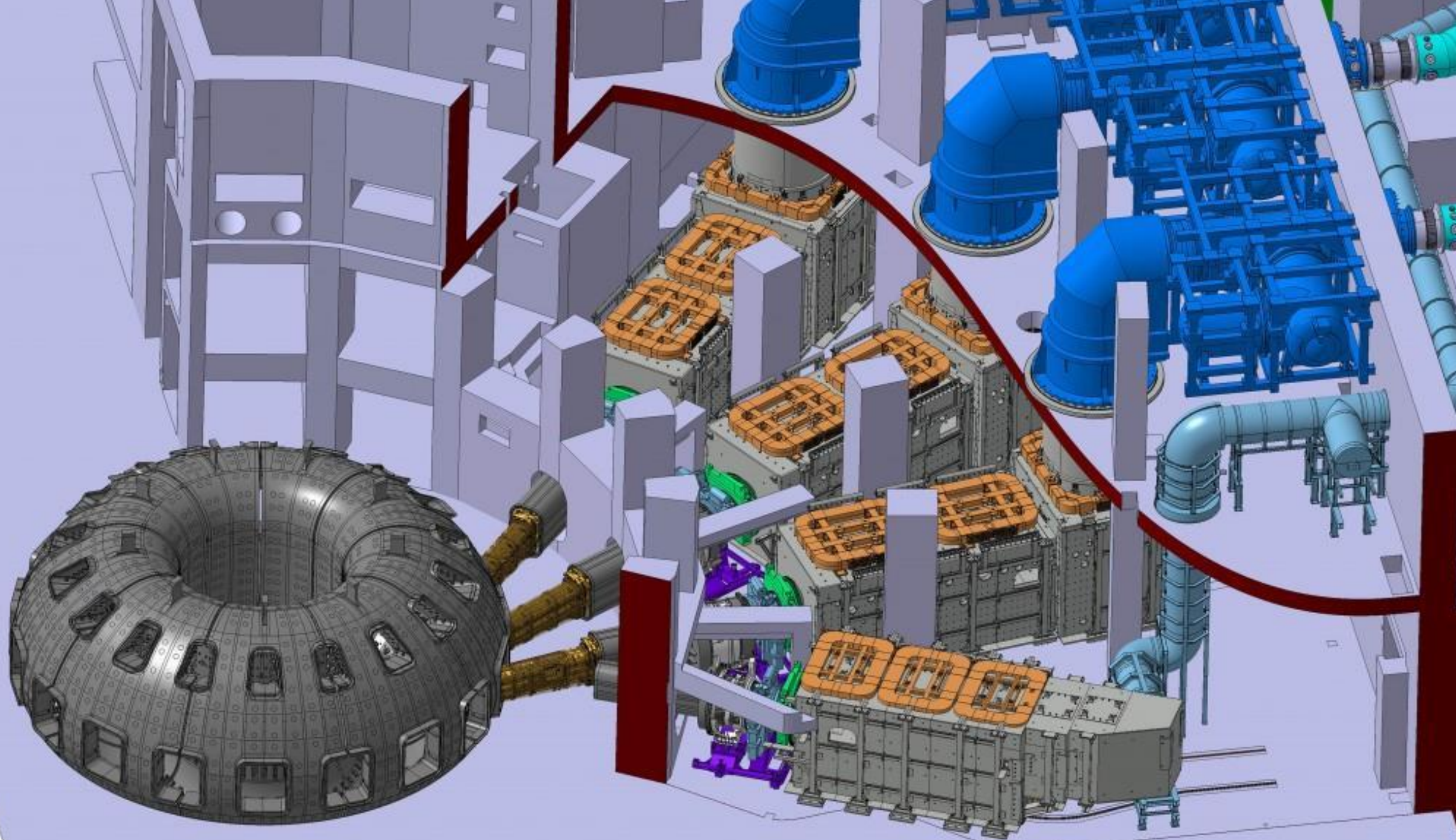
40 m

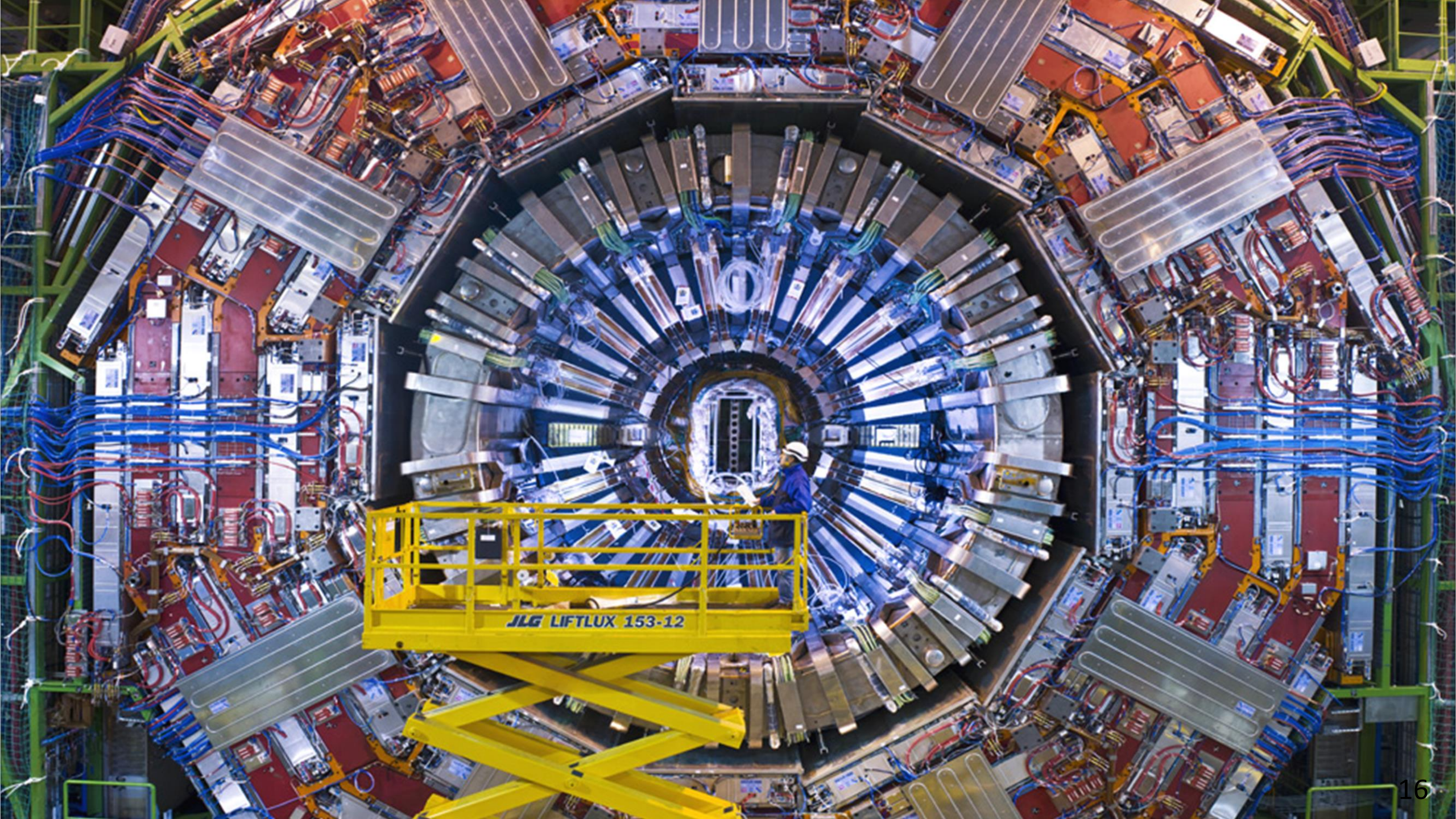
20 m





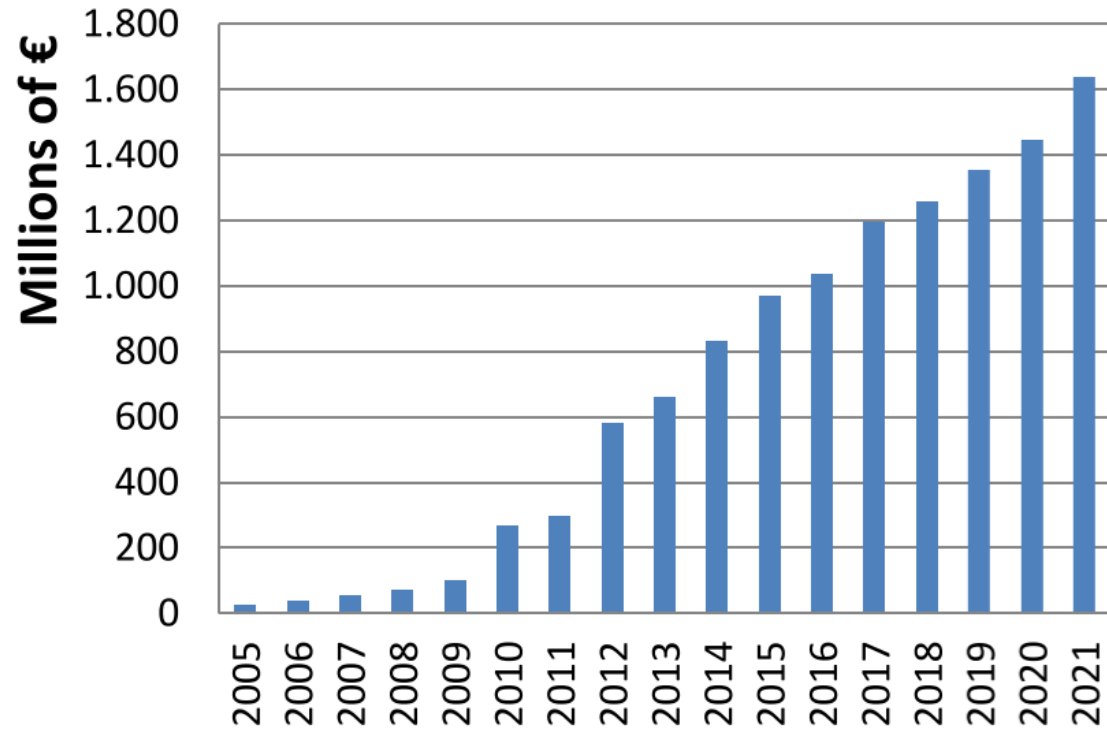






# Medium-long term vision and COLLABORATION

## Accumulated industrial Return in Large Scientific Facilities - Astronomy, Particle Physics and Fusion



## RETURN ON INVESTMENT OF THE PARTICIPATION TO ESS, LUND. CONTRACTS AWARDED TO SPANISH INDUSTRY

COMPANY	DESCRIPTION	VALUE €	
<b>2022</b>	AVS	Small-K Advanced Diffractometer SKADI	1.100.000
<b>2021</b>	Jema Energy	High Beta Klystron Modulators	5.425.070
	Nortemecánica S.A.	Light Shutter System (LSS) Frames	384.700
<b>2020</b>	Asturfeito	Inneer shielding - Part 4th	1.590.000
	Nortemecánica S.A.	Inneer Shielding for ESS's Target Station - Part 5th	298.750
	Pacadar	First common shielding manufacturing	3.915.860
	AVS	LoKI Detector Vacuum Vessel	385.491
	Equipos Nucleares	Monolith Portblock Package	5.987.972
<b>2019</b>	AVS	LoKI Collimator Vessel	278.412
	Nortemecánica S.A.	Concerning provision of raw material and manufacturing of the In-Bunker Baseplates	127.750
	AVS	Carrier for ESTIA selene guide	508.100
	Asturfeito	Inneer shielding - Part 2 and 3	4.845.000
	AVS	Bifrost Spectrometer Vessel and Motion System	701.854
	Fundación Tekniker	Remote Clamp	238.411
<b>2018</b>	Jema Energy	Supply agreement of the design, fabrication and delivery of 9 660k VA Klystron Modulators	9.155.193
	Thune Eureka S.A.	Ground shielding and vessel support	280.100
	Asturfeito	Inneer Shielding 1st Part	640.000
<b>TOTAL</b>			<b>35.860.663€</b>





# Some Spanish Companies working in Science Industry

## CATALOGUE: Spanish Capacities in Large Scientific Facilities



# Science and technology

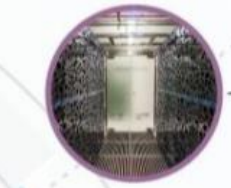
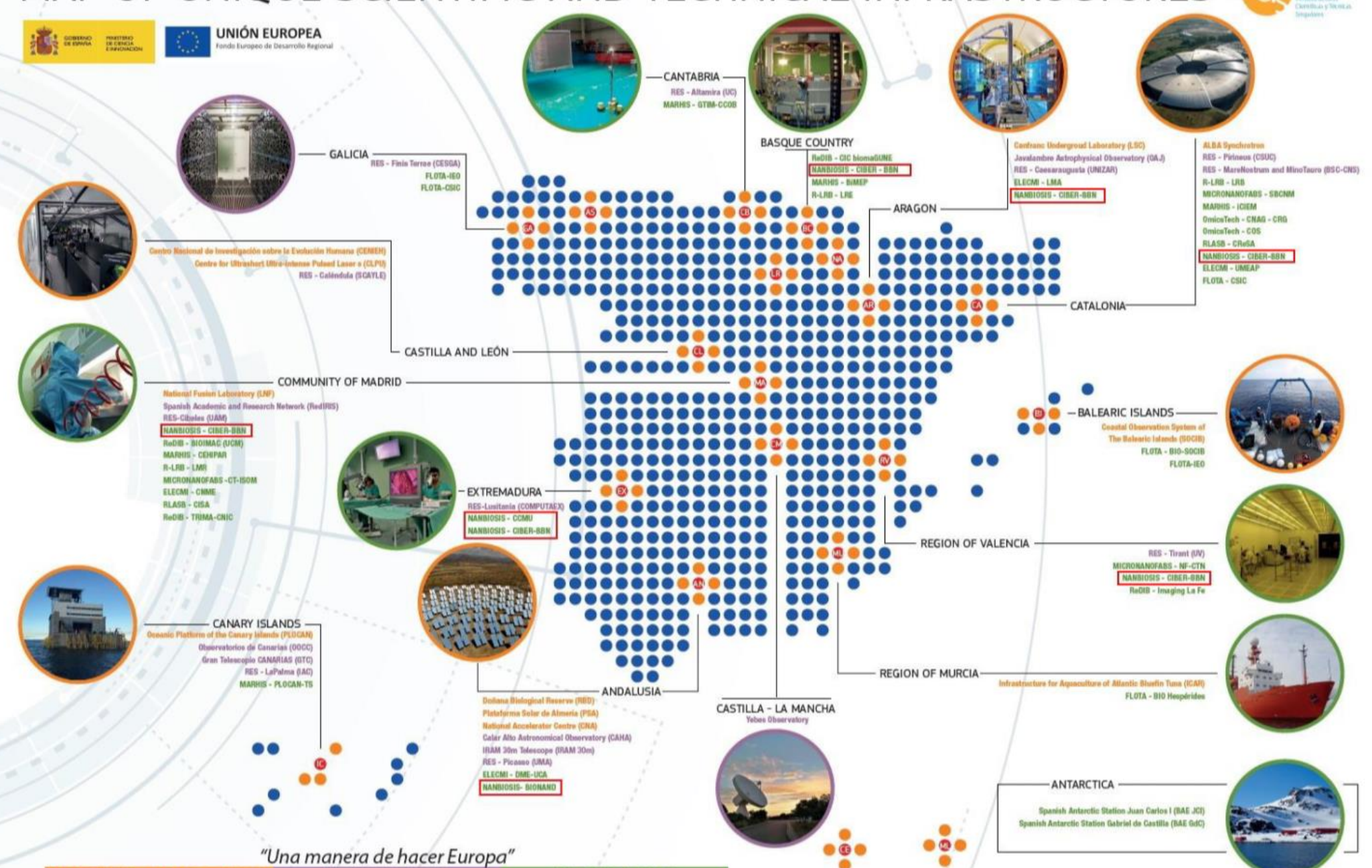


Dr. Erik Fernández

# MAP OF UNIQUE SCIENTIFIC AND TECHNICAL INFRASTRUCTURES



## Map of



**GALICIA**  
RES - Finis Terrae (CESGA)  
FLOTA-IEO  
FLOTA-CISIC



Centro Nacional de Investigación sobre la Evolución Humana (CEIH)  
Centro for Ultrashort Ultra-Intense Pulsed Laser (CULIP)  
RES - Galendula (IGAYLE)



**COMMUNITY OF MADRID**  
National Fusion Laboratory (NLF)  
Spanish Academic and Research Network (RedIRIS)  
RES-Cibeles (UAM)  
NANBIOSIS - CIBER-BBN  
RedIRIS - BIOMAC (UCM)  
MARHS - CEBIPAN  
R-LRB - LMI  
MICRONANOFABS - CT-ISOM  
ELECMI - CHIME  
RLASB - CISA  
RedIRIS - TRIMA-CHIC



**CANARY ISLANDS**  
Oceanic Platform of the Canary Islands (PLOGCAN)  
Observatorios de Canarias (OCCO)  
Gran Telescopio CANARIAS (GTC)  
RES - LaPalma (IAC)  
MARHS - PLOGCAN-TS



**EXTREMADURA**  
RES-Lusitania (COMPTAFEX)  
NANBIOSIS - CCMU  
NANBIOSIS - CIBER-BBN



**ANDALUSIA**  
Doñana Biological Reserve (RBD)  
Plataforma Solar de Almería (PSA)  
National Accelerator Centre (CNA)  
Calar Alto Astronomical Observatory (CAHA)  
IRAM 30m Telescope (IRAM 30m)  
RES - Picasso (UMA)  
ELECMI - DIME-UCA  
NANBIOSIS - BIOHARD



**CANTABRIA**  
RES - Altamira (UC)  
MARHS - GYM-CCOB



**BASQUE COUNTRY**  
RedIRIS - CIC biomAGINE  
NANBIOSIS - CIBER - BBN  
MARHS - BIMEP  
R-LRB - LRE



**ARAGON**  
Canfranc Underground Laboratory (LSC)  
Javalambre Astrophysical Observatory (OAJ)  
RES - Cosmargueta (UNIZAR)  
ELECMI - LMA  
NANBIOSIS - CIBER-BBN



**CATALONIA**  
ALBA Synchrotron  
RES - Pínnac (CSUC)  
RES - MareNostrum and MinoTauro (BSC-CSI)  
R-LRB - LRB  
MICRONANOFABS - SBCNM  
MARHS - CIEM  
OmicaTech - CNAO - CRG  
OmicaTech - COS  
RLASB - CRISA  
NANBIOSIS - CIBER-BBN  
ELECMI - UMEAP  
FLOTA - CISIC

**BALEARIC ISLANDS**  
Coastal Observation System of The Balearic Islands (SOCIE)  
FLOTA - BIO-SOCIE  
FLOTA-IEO



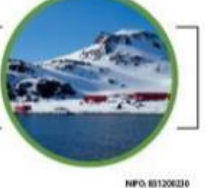
**REGION OF VALENCIA**  
RES - Tirant (IV)  
MICRONANOFABS - NF-CTN  
NANBIOSIS - CIBER-BBN  
RedIRIS - Imaging La Fe



**REGION OF MURCIA**  
Infrastructure for Aquaculture of Atlantic Striped Tuna (ICAT)  
FLOTA - BIO Hospedajes



**CASTILLA - LA MANCHA**  
Yebes Observatory



**ANTARCTICA**  
Spanish Antarctic Station Juan Carlos I (BAE JCI)  
Spanish Antarctic Station Gabriel de Castilla (BAE GdC)

"Una manera de hacer Europa"

ICTS WITH A SINGLE LOCATION    NETWORK OF ICTS    DISTRIBUTED ICTS

# Public Authorities



## Our goal is to help to:

Increase economic impact

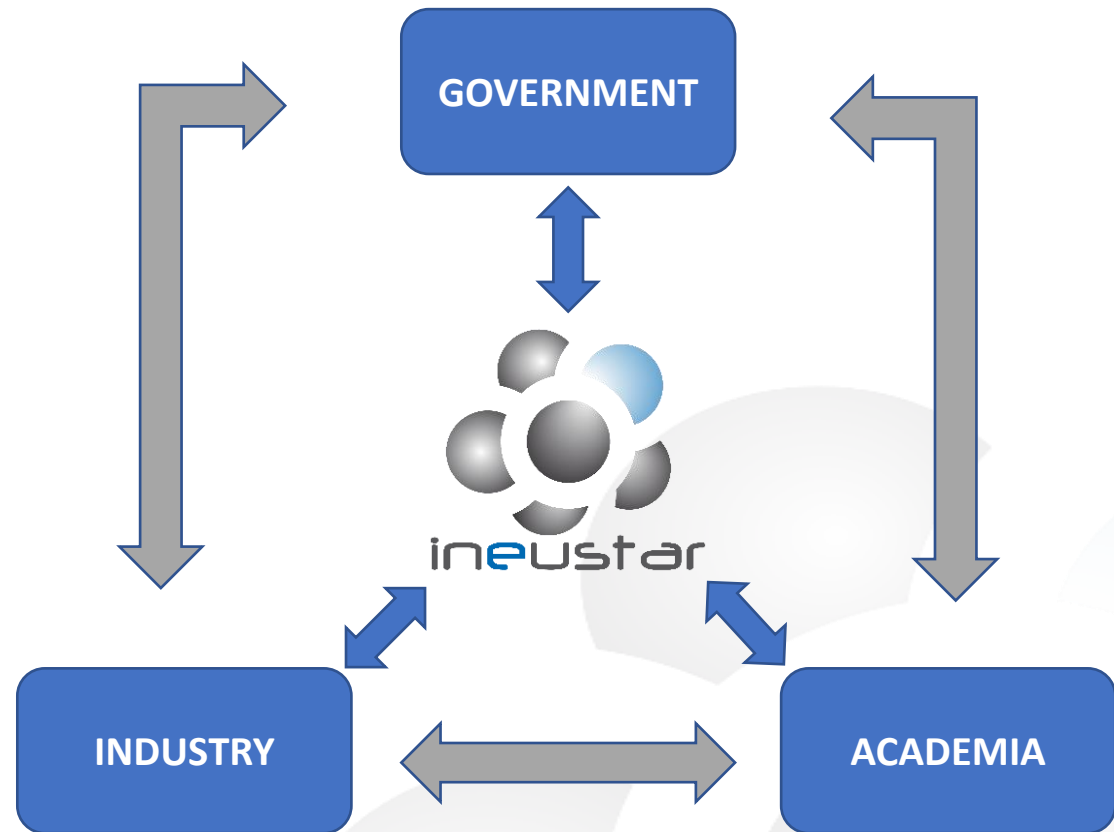
Boost technology transfer

Teaching and Training

Dissemination

Boost of R&D promotion

New activities attraction







**WHAT DO WE  
NEED TO SUCCEED?**









T R U S T





A close-up photograph of a file folder tab. The tab is made of light brown cardboard and has a white rectangular label with the word "Conclusions" printed in a black, serif font. The tab is part of a stack of folders, with other tabs visible in the background, including one labeled "Documents" and another partially labeled "Re". The background is softly blurred, showing the edges of other folders and their labels.

Conclusions

- **Spain in a reference country in Science Industry: COMPETITIVE AND TECHNOLOGICAL**
- **We are organized and dealing with the most challenging projects in Science around the world**
- **We need challenges, collaboration and opportunities (not for the Industry but for the industry-academia Tandem)**



**THANK YOU  
FOR YOUR ATTENTION !**

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**ineustar**  
Asociación Española de la Industria de la Ciencia