

PHYSICS in

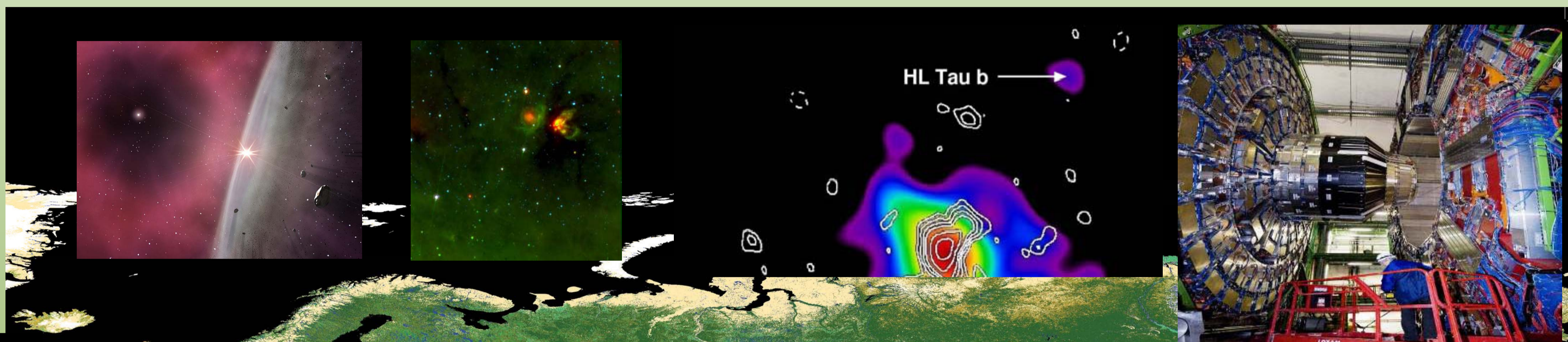


Spanish National Research Council

The *Agencia Estatal Consejo Superior de Investigaciones Científicas (CSIC)* is the largest public multidisciplinary research organisation in Spain. It has a staff of more than 12.000 employees, including 3000 scientists and 4000 pre and postdoctoral researchers, working in 130 Institutes and centres distributed across Spain. Its annual budget is close to 900 M euros.

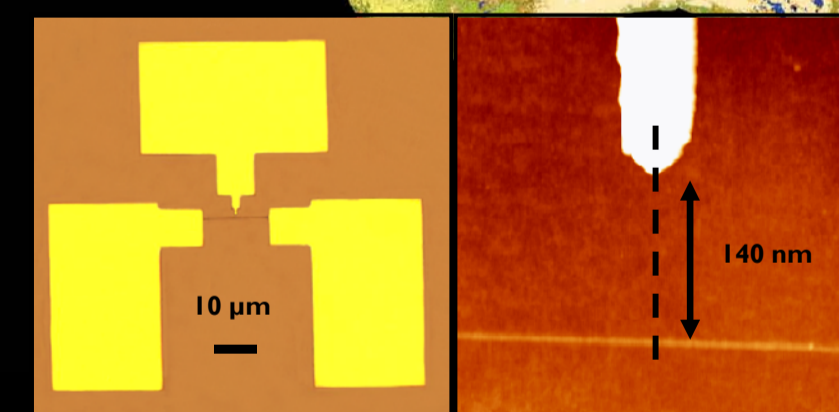
Physical Science and Technology Area

RESEARCH LINES IN PHYSICS	
Astrophysics and Space Sciences	ASTRO
Physical Technologies	TEC
Mathematics	MATH
Particle Physics, Astroparticles and Nuclear Physics	FPAN
Atomic and Molecular Physics	MOL
Optics	OPT
Complex Systems and Statistical Physics	QFISES
Nanoscience and Nanotechnology	NANO
Integrated Micro and Nano Systems	MICRO
Computing Sciences and Technologies	ICT



BILATERAL AGREEMENTS	
COUNTRY	INSTITUTION
China	Chinese Academy of Sciences (CAS)
	National Natural Science Foundation of China (NSFC)
Korea	Korea Science and Engineering Foundation (KOSEF)
Japan	Japan Society for the Promotion of Science (JSPS)
Taiwan	National Science Council (NSC)
Vietnam	Vietnamese Academy of Science and Technology (VAST)

CSIC INSTITUTES IN THE AREA OF CIENCIAS Y TECNOLOGÍAS FÍSICAS					
CAB	Centro de Astrobiología (Mixto INTA) - Madrid	ASTRO	IMB	Instituto de Microelectrónica de Barcelona	NANO
IAA	Instituto de Astrofísica de Andalucía - Granada	ASTRO	IMM	Instituto de Microelectrónica de Madrid	MICRO
ICE	Instituto de Ciencias del Espacio (Mixto IEEA) - Barcelona	ASTRO	INSE	Instituto de Microelectrónica de Sevilla	MICRO
ICMAT	Instituto de Ciencias Matemáticas (Mixto UAM-UC3M-UCM) - Madrid	MATH	IO	Instituto de Óptica - Madrid	OPT
IEM	Instituto de Estructura de la Materia - Madrid	MOL, FPAN, QFISES, OPT	IRI	Instituto de Robótica e Informática Industrial (Mixto UPC) - Barcelona	TEC, ICT
IFCA	Instituto de Física de Cantabria (Mixto UC) - Santander	ASTRO, FPAN, ICT, QFISES	LITEC	Laboratorio de Investigación en Tecnologías de (Mixto UZ, DGA) - Zaragoza	TEC
IFIC	Instituto de Física Corpuscular (Mixto IV) - Valencia	FPAN	CAR	Centro de Automática y Robótica (Mixto UPM) - Madrid	TEC, ICT
IFISC	Instituto de Física Interdisciplinaria y Sistemas Complejos (Mixto UIB) - Palma de Mallorca	QFISES, OPT	CAA- END	Centro de Acústica Aplicada y Evaluación No Destructiva (Mixto UPM) - Madrid	TEC
IFT	Instituto de Física Teórica (Mixto UAM) - Madrid	FPAN	IA	Instituto de Acústica - Madrid	TEC
IIA	Instituto de Inteligencia Artificial - Barcelona	QFISES	IFA	Instituto de Física Aplicada - Madrid	TEC, OPT, ICT
IFF	Instituto de Física Fundamental - Madrid	MOL, QFISES	IAI	Instituto de Automática Industrial - Madrid	TEC, ICT



LARGE SCIENTIFIC FACILITIES IN THE AREA			
Centro	Infraestructura	Plaza	Type
SB-	Sala Blanca del Centro Nacional de Microelectrónica	Barcelona	ICTS
CNM	(Clean Room at the National Centre in Microelectronics)		UUHH CSIC
CAHA	Centro Astronómico Hispano Alemán (Calar Alto)	Madrid	ICTS
CNA	Centro Nacional de Aceleradores (National Centre for Accelerators)	Sevilla	Joint CSIC-MPG, Joint CSIC-US-JA



The fundamental mission of the CSIC's Physical Science and Technology Area is the advancement of science by addressing new challenges, ranging from the basic approach provided by models and theories in physics and mathematics, through to the experimental and technological perspective where it serves as a complement to engineering.

Relevant ongoing projects with international dimension

- ESA missions: XMM, Planck, Herschel, COROT, Integral, Solar missions.
- ESO observatories: ALMA, VLT
- CERN: LHC (ATLAS & CMS);
- ILC, CDF
- FAIR, SPIRAL-2
- EELT, CTA, KM3NET
- EGI

New initiatives on instrumentation and energy

- Cryogenic technology for space
- Hard radiation sensors for high multiplicity
- Optical fibers, microlenses, adaptive optics
- Biomed photonics & neural imaging
- Social robotics
- High efficiency photovoltaic pannels
- Fuel cells

<http://www.csic.es>