

RESEARCH PROJECTS



International R&D Projects

1 Development of operando techniques and multiscale modelling to face the zero-excess solid-state battery challenge - OPERA.

Reference: GA 101103834
Funding Institution: European Commission
Period: 01/06/2023 - 31/05/2026
PI: Polop Jorda, Celia.

2 Engineered carrier transport in nanostructured semiconductors using functional disorder.



Reference: GA 101125962
Funding Institution: European Commission
Period: 01/04/2024 - 31/03/2029
PI: Prins, Ferry.

3 Future data storage using colloidal memory technology.

Reference: GA 101130615
Funding Institution: European Commission
Period: 01/11/2023 - 31/10/2026
PI: Delgado Buscalioni, Rafael.

4 Improving the sustainability of the European Magnetic Field Laboratory.

Reference: GA 871106
Funding Institution: European Commission
Period: 01/11/2020 - 31/10/2025
PI: Suderow Rodriguez, Hermann Jesus.

5 Integrative characterisation of Novel adenovirus VECTors aimed at Therapeutic Applications - INVECTA.

Reference: GA 101129778
Funding Institution: European Commission
Period: 01/12/2023 - 30/11/2027
PI: de Pablo Gomez, Pedro Jose.

6 Magnetoelectric 3D printing technology - the revolution of actuatable composites.

Reference: GA 101047081
Funding Institution: European Commission
Period: 01/10/2022 - 30/09/2026
PI: Zamora Abanades, Felix Juan.

7 Mid-infrared quantum technology for sensing.

Reference: GA 101070700
Funding Institution: European Commission
Period: 01/10/2022 - 31/03/2026
PI: Fernandez Dominguez, Antonio Isaac.

8 NOTsoQUANTUM: Realistic simulations of polaritonic chemistry.

Reference: GA 101029384
Funding Institution: European Commission
Period: 01/09/2022 - 10/01/2025
PI: Feist, Johannes Maximilian.

9 Quantum information science and Ultrafast nonlinear coherent control at the ATTOsecond timescale.

Reference: GA 101168628
Funding Institution: European Commission
Period: 01/09/2024 - 31/08/2028
PI: Palacios Cañas, Alicia.

10 Strong-coupling-enhanced nanoparticle array organic light emitting diode - SCOLED.

Reference: GA 101098813
Funding Institution: European Commission
Period: 01/05/2023 - 30/04/2026
PI: Feist, Johannes Maximilian.

11 Superconducting nanodevices and quantum materials for coherent manipulation - SUPERQUMAP.

Reference: CA 21144
Funding Institution: European Commission
Period: 06/10/2022 - 05/10/2026
PI: Suderow Rodriguez, Hermann Jesus.

12 TIME-Varying Nanophotonics for New Regimes of QED LIGHT-Matter Interactions - TIMELIGHT.



Reference: GA 101115792
Funding Institution: European Commission
Period: 01/10/2024 - 30/09/2029
PI: Arroyo Huidobro, Paloma.

13 Tuning heat transport in 2D materials with defects.



Reference: GA 101163902
Funding Institution: European Commission
Period: 01/01/2025 - 31/12/2029
PI: Ares Garcia, Pablo.



National R&D Projects

1 Acreditación a unidades de excelencia María de Maeztu.



Reference: CEX2023-001316-M
Funding Institution: Agencia Estatal de Investigación
Period: 01/04/2024 - 31/03/2028
PI: Perez Perez, Ruben.

2 Activación de Gases de Efecto Invernadero para Aplicaciones de Energía Limpia: un Estudio Combinado de Haces Moleculares y XPS.

Reference: PID2023-147466OB-C21
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2024 - 31/12/2027
PI: Farias Tejerina, Daniel.



3 Biomateriales para electrónica transitoria (BIOTREL).

NEW

Reference: CNS2024-154593
Funding Institution: Agencia Estatal de Investigación
Period: 01/04/2025 - 31/03/2027
PI: Zotti, Linda Angela.

4 Canalización de energía en semiconductores nanoestructurados.

Reference: PID2022-141579OB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2023 - 31/08/2026
PI: Prins, Ferry.

5 Caracterización de excitaciones ópticas en materiales 2d con resolución atómica.

Reference: PID2021-128011NB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2022 - 31/08/2026
PI: Lopez Vazquez de Parga, Amadeo and Otero Martin, Roberto.

6 Conexión entre óptica cuántica y nanofotónica.

Reference: EUR2023-143478
Funding Institution: Agencia Estatal de Investigación
Period: 01/12/2023 - 30/11/2025
PI: Feist, Johannes Maximilian.

7 Configuración de la estructura electrónica de materiales 2D: fotorrespuesta y propiedades de espín.

Reference: PID2021-123295NB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2022 - 28/02/2026
PI: Garcia Michel, Enrique.

8 Control químico de redes metal-orgánicas de zirconio para la captura y detección óptica de contaminantes ambientales.

Reference: PID2021-123839OB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2022 - 31/08/2026
PI: Platero Prats, Ana Eva.

9 Controlando átomo a átomo los dispositivos de grafeno.

Reference: PID2023-149106NB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2024 - 31/12/2027
PI: Brihuega Alvarez, Ivan.

10 Controlando el Transporte Coherente de Calor en la Nanoscala y sus Implicaciones Termoeléctricas.

NEW

Reference: PID2024-157536NB-C22
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2025 - 31/08/2028
PI: Cuevas Rodriguez, Juan Carlos.

11 Correlaciones cuánticas e interferencia de fotones interactuantes en estructuras materia-luz bidimensionales.

Reference: PID2020-113415RB-C22
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2021 - 31/08/2025
PI: Marchetti, Francesca Maria and Valle Reboul, Elena del.

12 Corrientes de calor en la escala nanométrica: fluctuaciones y efectos no lineales.

Reference: PID2022-142911NB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2023 - 31/12/2025
PI: Sanchez Rodrigo, Rafael.

13 Cuántica.

Reference: PID2023-150420NB-C31
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2024 - 31/12/2027
PI: Marchetti, Francesca Maria and Valle Reboul, Elena del.

14 Defectos y transporte térmico de materiales 2D en la nanoescala.

Reference: CNS2023-143713
Funding Institution: Agencia Estatal de Investigación
Period: 01/04/2024 - 30/06/2026
PI: Ares Garcia, Pablo.

15 Deformación del material y dinámica excitónica.

Reference: CNS2022-135803
Funding Institution: Agencia Estatal de Investigación
Period: 01/07/2023 - 30/06/2025
PI: Picon Alvarez, Antonio.

16 Desarrollando la Óptica Cuántica en el Terahercio.

NEW

Reference: PID2024-156077OB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2025 - 31/08/2028
PI: Martin Cano, Diego and Fernandez Dominguez, Antonio Isaac.

17 Descifrando las propiedades magnéticas de sistemas basados en nanohilos y nanopartículas para imanes permanentes.

Reference: TED2021-130957B-C55
Funding Institution: Agencia Estatal de Investigación
Period: 01/12/2022 - 31/05/2025
PI: Burzuri Linares, Enrique.

18 Dinámica de attosegundos inducida por luz XUV y de rayos X en átomos y moléculas en fase gas.

Reference: PID2022-138288NB-C32
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2023 - 31/08/2026
PI: Palacios Cañas, Alicia.

19 Dinámica electrónica y técnicas ultrarrápidas.

Reference: PID2021-126560NB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2022 - 31/08/2025
PI: Picon Alvarez, Antonio.

20 Dinámica, transporte de espín y ruido en antiferromagnéticos epitaxiales y otros sistemas novedosos para procesamiento ultrarrápido y poco disipativo de señales.

Reference: PID2021-124585NB-C32
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2022 - 31/05/2026
PI: Aliev Kazanski, Farkhad.

21 Diseño átomo a átomo de nanocatalizadores de TI-SI para la producción de hidrógeno verde por disociación del agua.

NEW

Reference: CNS2024-154772
Funding Institution: Agencia Estatal de Investigación
Period: 01/04/2025 - 31/03/2027
PI: Martinez Galera, Antonio Javier.

22 Diseño de materiales 2D para aplicaciones en energía II: diseño y procesabilidad.

Reference: PID2022-138908NB-C31
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2023 - 31/08/2026
PI: Zamora Abanades, Felix Juan.

23 Dispositivos ópticos basados en patrones de nanopartículas para aplicaciones novedosas en tecnologías de detección sostenibles.

Reference: PID2023-151078OB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2024 - 31/12/2027
PI: Hernando Perez, Mercedes.

24 Dotación adicional Juan de la Cierva

Reference: IJC2020-042755-I
Funding Institution: Agencia Estatal de Investigación
Period: 01/03/2022 - 28/02/2025
PI: Lopez-Polin Peña, Guillermo.

25 Dotación adicional Ramón y Cajal

Reference: RYC2022-037744-I
Funding Institution: Agencia Estatal de Investigación
Period: 01/01/2024 - 31/12/2028
PI: Assenza, Salvatore.

26 Dotación adicional Ramón y Cajal

Reference: RYC2021-031050-I
Funding Institution: Agencia Estatal de Investigación
Period: 01/01/2023 - 31/12/2025
PI: Gonzalez Herrero, Hector.

27 Dotación adicional Ramón y Cajal

Reference: RYC2023-044003-I
Funding Institution: Agencia Estatal de Investigación
Period: 01/12/2024 - 30/11/2029
PI: Lopez-Polin Peña, Guillermo.

28 Dotación adicional Ramón y Cajal

Reference: RYC2022-038197-I
Funding Institution: Agencia Estatal de Investigación
Period: 01/01/2024 - 31/12/2028
PI: Martinez Galera, Antonio Javier.

29 Dotación adicional Ramón y Cajal

Reference: RYC2021-030929-I
Funding Institution: Agencia Estatal de Investigación
Period: 01/01/2023 - 24/05/2026
PI: Hernando Perez, Mercedes.

30 Dotación adicional Ramón y Cajal

Reference: RYC2021-031568-I
Funding Institution: Agencia Estatal de Investigación
Period: 01/12/2022 - 21/03/2026
PI: Arroyo Huidobro, Paloma.

31 Dotación adicional Ramón y Cajal

Reference: RYC2018-024328-I
Funding Institution: Agencia Estatal de Investigación
Period: 01/11/2020 - 02/01/2026
PI: Platero Prats, Ana Eva.

32 Dotación adicional Ramón y Cajal

Reference: RYC2020-029730-I
Funding Institution: Agencia Estatal de Investigación
Period: 01/05/2022 - 30/04/2027
PI: Martin Cano, Diego.

33 Dotación adicional Ramón y Cajal

Reference: RYC2019-028429-I
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2021 - 03/01/2027
PI: Burzuri Linares, Enrique.

34 Dotación adicional Ramón y Cajal

Reference: RYC2019-028189-I
Funding Institution: Agencia Estatal de Investigación
Period: 01/05/2021 - 30/04/2026
PI: Aragones Gomez, Juan Luis.

35 Dotación adicional Ramón y Cajal

Reference: RYC2020-030302-I
Funding Institution: Agencia Estatal de Investigación
Period: 01/03/2022 - 28/02/2027
PI: Ares Garcia, Pablo.

36 Ecosistema siesta de técnicas de simulación de materiales (SIESTA-UAM).

Reference: PID2022-139776NB-C64
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2023 - 31/08/2026
PI: Soler Torroja, Jose Maria and Alvarez Carrera, Jose Vicente.

37 Electrónica coherente en dispositivos superconductores.

Reference: PID2020-117992GA-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2021 - 31/08/2025
PI: Burset Atienza, Pablo.

38 Electrónica cuántica coherente superconductora.

Reference: CNS2022-135950
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2023 - 31/12/2025
PI: Burset Atienza, Pablo.

39 Emisores y controladores de luz cuántica.

Reference: PID2023-148061NB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2024 - 31/12/2027
PI: Anton Solanas, Carlos and Viña Liste, Luis María Antonio.

40 Enfoques predictivos teórico-experimentales integrados para modelización de procesos disipativos en materia blanda y biomoléculas.

NEW

Reference: PID2024-158994OB-C41
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2025 - 31/08/2028
PI: Delgado Buscalioni, Rafael.

41 Enhancing the mechanical stability of interfaces in solid-state li-ion batteries for energy-intensive applications.

Reference: PCI2022-132998 (plan MRR)
Funding Institution: Agencia Estatal de Investigación
Period: 01/05/2022 - 30/10/2025
PI: Polop Jorda, Celia.

42 Entorno Cuántico para Circuitos Térmicos Coherentes.

NEW

Reference: PID2024-157821NB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2025 - 31/08/2028
PI: Burset Atienza, Pablo and Sanchez Rodrigo, Rafael.

43 Estudios computacionales de materiales biomoleculares y bioinspirados.

Reference: PID2021-125604NB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2022 - 31/12/2026
PI: Zotti, Linda Angela and Ortega Mateo, Jose.

44 Explorando interacción y fuerzas luz-materia en redes complejas de partículas.

Reference: PID2022-137569NB-C43
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2023 - 31/08/2026
PI: Marques Ponce, Manuel Ignacio.

45 Explorando las propiedades biofísicas de virus individuales con medios fisicoquímicos: liberación de genoma y dispositivos optomecánicos.

NEW

Reference: PID2024-160924OB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2025 - 31/08/2028
PI: de Pablo Gomez, Pedro Jose.

46 Explorando los determinantes físicos y estructurales de la desactivación de virus individuales sobre superficies: atrapamiento, biomecánica y desempaquetamiento genómico.

Reference: PID2021-126608OB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2022 - 30/04/2026
PI: de Pablo Gomez, Pedro Jose.

47 Fundamentos microscópicos del microscopio de fuerzas atómicas y microbalanzas de cuarzo para sensar biomoléculas.

Reference: PID2020-117080RB-C51
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2021 - 30/04/2025
PI: Tarazona Lafarga, Pedro Jose and Delgado Buscalioni, Rafael.

48 Generación de Energía Mediante Efectos Termoeléctricos Gigantes Controlados por Estado Magnético en Híbridos de Superconductor-Ferromagnético.

NEW

Reference: PID2024-155399NB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2025 - 31/08/2028
PI: Aliev Kazanski, Farkhad.

49 Green materials for sustainable magneto-electronic memories.

NEW

Reference: PCI2025-163257
Funding Institution: Agencia Estatal de Investigación
Period: 01/12/2025 - 30/11/2028
PI: Velez Centoral, Saül.

50 Hacia superconductores de alta temperatura y campo crítico: manipulando y comprendiendo correlaciones electrónicas en dos dimensiones.

Reference: PID2023-150148OB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2024 - 31/12/2027
PI: Suderow Rodriguez, Hermann Jesus and Guillamon Gomez, Isabel.

51 Hacia un nuevo qubit de shiba basado en puntos cuánticos híbridos superconductor-semiconductor.

Reference: TED2021-130292B-C41
Funding Institution: Agencia Estatal de Investigación
Period: 01/12/2022 - 30/09/2025
PI: Levy-Yeyati Mizrahi, Alfredo.

52 Herramientas de simulación y aprendizaje automático para la caracterización de la estructura y la respuesta mecánica de materiales avanzados y biomoléculas.

Reference: PID2023-149150OB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2024 - 31/12/2027
PI: Assenza, Salvatore and



53 Heteroestructuras 2D de van der waals superconductoras-magnéticas para magnónica cuántica avanzada.

NEW

Reference: CNS2024-154501
Funding Institution: Agencia Estatal de Investigación
Period: 01/04/2025 - 31/03/2027
PI: Burzuri Linares, Enrique.

54 Heteroestructuras híbridas con funcionalidades activas magnéticas, ferroeléctricas, orbitales y de espín.

NEW

Reference: PID2024-157112OB-C54
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2025 - 31/08/2028
PI: VELEZ CENTORAL, Saül.

55 Influencia de la nanoestructuración en las propiedades mecanoquímicas de cátodos composite zero-strain para baterías de ion LI de estado sólido.

Reference: PID2021-124667OB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2022 - 31/08/2026
PI: Polop Jorda, Celia.

56 Ingeniería cuántica de luz Y materia en la nanoescala.

Reference: PID2021-126964OB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2022 - 30/04/2026
PI: Martin Cano, Diego and Fernandez Dominguez, Antonio Isaac.

57 Integración de GPUs y almacenamiento para proyectos de Inteligencia Artificial.

Reference: EQC2024-008476-P
Funding Institution: Agencia Estatal de Investigación
Period: 01/01/2024 - 30/06/2026
PI: Garcia Vidal, Francisco Jose.

58 Integración monolítica de materiales híbridos ferroeléctricos/plasmónicos/2D para nanofotónica integrada.

Reference: PID2022-137444NB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2023 - 31/08/2026
PI: Ramirez Herrero, Maria De La O and Bausa Lopez, Luisa Eugenia.

59 Interacción entre mecanismos físicos y moleculares en la regulación de la formación de la retina de vertebrados.

Reference: PID2022-140421NB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2023 - 31/08/2026
PI: Miguez Gomez, David.

60 Interacciones cuánticas luz-materia en escalas extremas.

NEW

Reference: PID2024-161142NB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2025 - 31/08/2028
PI: Feist, Johannes Maximilian.

61 Magnónica cuántica para espintrónica en el límite 2D.

Reference: PID2022-140923NB-C22
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2023 - 31/08/2027
PI: Burzuri Linares, Enrique.

62 Manipular la materia mediante las fluctuaciones del vacío.

Reference: PID2021-125894NB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2022 - 31/08/2025
PI: Feist, Johannes Maximilian and Garcia Vidal, Francisco Jose.

63 Materiales con ordenamiento ferroeléctrico y antiferromagnético para aplicaciones espintrónicas ultrarrápidas y controlables eléctricamente.

Reference: PID2021-122980OA-C53
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2022 - 31/08/2026
PI: Velez Centoral, Saül.

65 Materiales porosos avanzados en separaciones energéticas de baja energía de gases de interés medioambiental.

Reference: TED2021-129886B-C42
Funding Institution: Agencia Estatal de Investigación
Period: 01/12/2022 - 31/08/2025
PI: Zamora Abanades, Felix Juan.

67 Materiales topológicos para fotovoltaica.

Reference: TED2021-131323B-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/12/2022 - 30/09/2025
PI: Rubio Bollinger, Gabino and Palacios Burgos, Juan Jose.

69 Mecánica del calor: uniendo transporte de calor y fricción en la nanoescala.

Reference: TED2021-132219A-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/12/2022 - 30/09/2025
PI: Ares Garcia, Pablo.

71 Micro-robots autónomos con capacidad de detección.

Reference: CNS2023-145447
Funding Institution: Agencia Estatal de Investigación
Period: 01/04/2024 - 30/06/2026
PI: Aragones Gomez, Juan Luis.

64 Materiales no centrosimétricos de baja dimensionalidad: teoría y experimentos.

Reference: PID2022-141712NB-C21
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2023 - 31/08/2026
PI: Rubio Bollinger, Gabino and Palacios Burgos, Juan Jose.

66 Materiales tisulares basados en vesículas: respuestas colectivas emergentes bajo campos eléctricos.

Reference: CNS2023-145460
Funding Institution: Agencia Estatal de Investigación
Period: 01/04/2024 - 30/06/2026
PI: Rodriguez Arriaga, Laura.

68 Materiales y sensores cuánticos mediante implantación de iones a MEV.

Reference: PID2021-127498NB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2022 - 28/02/2026
PI: Ramos Ruiz, Miguel Angel.

70 Medios con variación temporal para electrodinámica clásica y cuántica.

Reference: PID2022-141036NA-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2023 - 31/08/2026
PI: Arroyo Huidobro, Paloma.

72 Nanoestructuras híbridas: del transporte térmico a los dispositivos cuánticos.

Reference: PID2023-150224NB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2024 - 31/12/2027
PI: Levy-Yeyati Mizrahi, Alfredo.

73 Nanoingeniería de dispositivos de estado sólido para computación neuromórfica.

Reference: PID2020-116181RB-C31
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2021 - 31/08/2025
PI: Camarero de Diego, Julio.

74 Nuevas aplicaciones con fuentes extremas de luz.

Reference: CNS2023-145254
Funding Institution: Agencia Estatal de Investigación
Period: 01/04/2024 - 30/06/2026
PI: Feist, Johannes Maximilian.

75 Nuevos conceptos y métodos para la comprensión y caracterización de materia cuántica topológica fuertemente interactuante.

Reference: PID2022-139995NB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2023 - 31/08/2026
PI: Bravo Abad, Jorge and Merino Troncoso, Jaime.

76 Optimización de materiales bidimensionales para aplicaciones en energía II: recolección de energía mediante dispositivos termo y flexoelectrónicos.

Reference: PID2022-138908NB-C32
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2023 - 31/08/2026
PI: Gomez Herrero, Julio and Lopez-Polin Peña, Guillermo.

77 Orbitrónica: un giro en electrónica.

NEW

Reference: CNS2024-154658
Funding Institution: Agencia Estatal de Investigación
Period: 01/04/2025 - 31/03/2027
PI: Velez Centoral, Saül.

78 Orden y autoensamblaje entrópico en fluidos en dos dimensiones.

Reference: PID2023-148633NB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2024 - 31/12/2027
PI: Cinacchi, Giorgio and Velasco Caravaca, Enrique.

79 OSCAR, an object segmentation, counter, analysis resource.

Reference: PDC2022-133147-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/12/2022 - 30/09/2025
PI: Miguez Gomez, David.

80 Planta de licuefacción de helio para la ciencia y tecnología cerca del cero absoluto.

Reference: EQC2021-007277-P
Funding Institution: Agencia Estatal de Investigación
Period: 01/06/2021 - 31/12/2025
PI: Suderow Rodriguez, Hermann Jesús.

81 Producción de hidrógeno por disociación electroquímica de agua asistida por fotocatalizadores con control de espín.

Reference: TED2021-131042B-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/12/2022 - 31/07/2025
PI: Miguel Llorente, Juan Jose de.

82 Propiedades físicas intrínsecas de materiales 2D en la nanoescala.

Reference: PID2022-142331NB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2023 - 31/08/2026
PI: Ares Garcia, Pablo and Gomez-Navarro Gonzalez, Cristina.

83 Quantum communications with bright solid-state single-photon emitters at room temperature.

Reference: TED2021-131042B-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/12/2022 - 31/07/2025
PI: Miguel Llorente, Juan Jose de.

84 Reactividad ultrarrápida en la nanoescala.

Reference: PID2022-138470NB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2023 - 31/08/2026
PI: Diaz-Tendero Victoria, Sergio.

85 Redes metal-orgánicas como plataformas para la detección de contaminantes ambientales.

Reference: CNS2022-135261
Funding Institution: Agencia Estatal de Investigación
Period: 01/07/2023 - 30/09/2025
PI: Platero Prats, Ana Eva.

86 Retos y oportunidades de las tecnologías superconductoras en la aviación comercial sin emisiones de gases invernadero.

Reference: TED2021-130546B-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/12/2022 - 30/09/2025
PI: Suderow Rodriguez, Hermann Jesus and Guillamon Gomez, Isabel.

87 Simulación multiescala de materiales porosos avanzados.

Reference: TED2021-129886B-C44
Funding Institution: Agencia Estatal de Investigación
Period: 01/12/2022 - 31/08/2025
PI: Tarazona Lafarga, Pedro Jose and Velasco Caravaca, Enrique.

88 Soluciones para aumentar la productividad y eficiencia de la planta de producción de helio líquido del Campus de Cantoblanco.

Reference: EQC2024-008001-P
Funding Institution: Agencia Estatal de Investigación
Period: 01/01/2024 - 30/06/2026
PI: Suderow Rodriguez, Hermann Jesus.

89 Superando la difusión: transporte dinámico en medios complejos.

Reference: PID2022-143010NB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2023 - 31/08/2027
PI: Aragones Gomez, Juan Luis and Rodriguez Arriaga, Laura.

90 Superconductividad en la nanoescala: dispositivos cuánticos de 0 A 2D.

Reference: PID2020-117671GB-I00
Funding Institution: Agencia Estatal de Investigación
Period: 01/09/2021 - 31/08/2025
PI: Levy-Yeyati Mizrahi, Alfredo.

91 Uniones josephson basados en acoplamiento espin-orbita para memorias criogénicas no disipativas.

Reference: TED2021-130196B-C22
Funding Institution: Agencia Estatal de Investigación
Period: 01/12/2022 - 30/09/2025
PI: Aliev Kazanski, Farkhad.

92 Visualizar el transporte de energía en semiconductores desordenados.

Reference: CNS2023-143577
Funding Institution: Agencia Estatal de Investigación
Period: 01/04/2024 - 30/06/2026
PI: Prins, Ferry.



1 Ayuda para la realización del doctorado industrial: Eva Ortiz Mansilla.

Reference: IND2022/IND-23536
Period: 01/01/2023 - 31/12/2025
PI: Cuevas Rodriguez, Juan Carlos.

2 Ayuda para la realización del doctorado industrial: Patricia Martínez Muñoz

Reference: IND2023/IND-27975
Period: 08/01/2024 - 07/01/2027
PI: Zamora Abanades, Felix Juan.

3 Convenio entre la Comunidad de Madrid y la Universidad Complutense de Madrid para la Concesión de una Subvención Directa para la Realización del Proyecto Materiales Disruptivos Bidimensionales (2D) dentro del Plan Complementario en el Área de Materiales Avanzados en el Marco del Componente 17, Inversión 01 del Plan de Recuperación, Transformación y Resiliencia Financiado por la Unión Europea Next Generation-Eu por importe de 10.500.000 Euros.

Reference: IND2022/IND-23536
Period: 01/01/2023 - 31/12/2025
PI: Cuevas Rodriguez, Juan Carlos.

4 Covalent and Metalorganic Frameworks for Water Purification of Pharmaceutical Contaminants.

Reference: TEC-2024/ECO-332 - NANOFORCES_UAM
Period: 01/01/2025 - 31/12/2028
PI: Ares Garcia, Pablo, Perez Perez, Ruben and Zamora Abanades, Felix Juan.

5 Dotación adicional captación de talento CM

Reference: IND2022/IND-23536
Period: 01/01/2023 - 31/12/2025
PI: Cuevas Rodriguez, Juan Carlos.

6 Dotación adicional captación de talento CM

Reference: 2020-T1/IND-20041
Period: 01/01/2022 - 31/12/2026
PI: Velez Centoral, Saül.

7 Laboratorios Inteligentes para la Ciencia del Futuro: Descubrimiento de materiales avanzados para Fotosíntesis Artificial.

NEW Reference: TEC-2024/TEC-308 - LOCAL-MATER
Period: 01/01/2025 - 31/12/2028
PI: Platero Prats, Ana Eva.

8 Materia en Acción con Láseres Ópticos y de Rayos-X / Matter in Action with ulTRafast optical and X-ray lasers.

NEW Reference: TEC-2024/TEC-85 - UAM-TCC
Period: 01/01/2025 - 31/12/2028
PI: Palacios Cañas, Alicia.

9 Soluciones sostenibles del NanoMAGnetismo para TIC.

NEW Reference: TEC-2024/TEC-380
Funding Institution: COMUNIDAD DE MADRID
Period: 01/01/2025 - 31/12/2028
PI: Suderow Rodriguez, Hermann Jesus.





Private Funding

1 Distribución cuántica de claves con emisores de fotones a temperatura ambiente.

Reference: LEO23-1-8740
Funding Institution: Fundacion BBVA
Period: 19/05/2023 - 31/12/2025
PI: Anton Solanas, Carlos.

2 Fuentes ultrabrillantes de fotones en cavidades abiertas (ULTRA-BRIGHT).

Reference: ULTRA-BRIGHT
Funding Institution: Fundacion Ramon Areces
Period: 14/04/2023 - 14/04/2026
PI: Anton Solanas, Carlos.

3 Light materials for next generation electronics (LIGHT-MATER).

NEW

Reference: CIVP22S18216
Funding Institution: Fundacion Ramon Areces
Period: 19/02/2025 - 18/02/2028
PI: Velez Centoral, Saul.

4 Nanophotonic-based quantum sensing and simulation.

NEW

Reference: EIC24-1-17304
Funding Institution: Fundacion BBVA
Period: 31/10/2025 - 31/10/2028
PI: Fernandez Dominguez, Antonio Isaac.



UAM Funding

1 Complejidad en física de la materia condensada.

Reference: UAM2023-UAM/201
Period: 06/10/2023 - 31/12/2027
PI: Garcia Michel, Enrique.

2 Control coherente de Andreev en nanoestructuras híbridas.

NEW

Reference: UAM2025-RL004
Period: 01/04/2025 - 31/03/2028
PI: Levy-Yeyati Mizrahi, Alfredo.

3 Dotación para proyecto de Edouardos Loukopoulos para Research Cost CIVIS 3i.

Period: 16/12/2023 - 15/12/2025
PI: Platero Prats, Ana Eva.

4 Dotación para proyecto de Ruth Elena Tichauer para Research Cost - CIVIS 3i.

Period: 01/11/2023 - 31/10/2025
PI: Feist, Johannes Maximilian.

5 Emergencia y complejidad en Física de la Materia Condensada.

Reference: UAM/179
Period: 15/06/2022 - 31/12/2026
PI: Gomez Herrero, Julio.

6 Estrategia Integral para la Captura, Control y Caracterización de Nanopartículas.

NEW

Reference: UAM/252
Period: 01/03/2025 - 28/02/2028
PI: Hernando Perez, Mercedes.

7 Física virológica con AFM y fluorescencia: desempaquetamiento de cargo y ácidos nucleicos.

Reference: UAM/240
Period: 01/10/2024 - 30/09/2028
PI: de Pablo Gomez, Pedro Jose.

8. Incentivo participación proyectos europeos Celia Polop.

Reference: UAM/217
Period: 20/05/2024 - 19/05/2025
PI: Polop Jorda, Celia.

9 Incentivo participación proyectos europeos Héctor González.

Reference: UAM/222
Period: 20/05/2024 - 19/05/2025
PI: Gonzalez Herrero, Hector.

10 Incentivo participación proyectos europeos Pablo Ares.

Reference: UAM/234
Period: 20/05/2024 - 19/05/2025
PI: Ares Garcia, Pablo.

11 Incentivo participación proyectos europeos Salvatore Assenza

Reference: UAM/237
Period: 20/05/2024 - 19/05/2025
PI: Assenza, Salvatore.

12 Interacción luz-materia cuántica ultrarrápida

NEW Reference: UAM2025-RL020
Period: 01/11/2025 - 31/10/2028
PI: Feist, Johannes Maximilian.

13 Materiales disruptivos bidimensionales (2D) - MAD2DCM.

Reference: UAM/187
Period: 01/03/2023 - 31/12/2025
PI: Lopez Vazquez de Parga, Amadeo.

14 Medidas de torque magnético en muestras basadas en metales ligeros.

Reference: UAM/215
Period: 01/06/2024 - 31/05/2026
PI: Velez Centoral, Saül.

15 Nuevas formas de interacción luz-materia.

NEW Reference: UAM2025-RL018
Period: 10/10/2025 - 30/09/2029
PI: Arroyo Huidobro, Paloma.

16 Propiedades ópticas de excitones en semiconductores.

Reference: UAM/160
Period: 01/01/2021 - 31/12/2027
PI: Viña Liste, Luis María Antonio.

17 Transporte de calor y defectos en 2Ds.

NEW Reference: UAM2025-RL001
Period: 01/01/2025 - 31/12/2026
PI: Ares Garcia, Pablo.

18 Transporte electronico a traves de biomoleculas.

Reference: UAM/127
Period: 06/03/2019 - 31/12/2026
PI: Zotti, Linda Angela.

19 UAM/244.

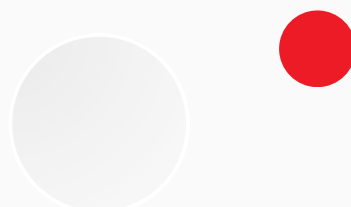
Reference: UAM2024-UAM/244
Period: 01/09/2024 - 31/08/2027
PI: Prins, Ferry.

20 UAM2023-UAM/208: Gestión de I+D asociada a las actividades de investigación, solicitudes de proyectos y ejecución de los vigentes.

Reference: UAM/208
Period: 01/01/2024 - 31/12/2026
PI: Perez Perez, Ruben.

21 Uso de microscopia de campos magneticos extremos para visualizar materiales con correlaciones electrónicas.

Reference: UAM/117
Period: 01/09/2018 - 30/06/2026
PI: Guillamon Gomez, Isabel.



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INVITED LECTURES

- 1 A new toolbox for linear and non-linear optical response in 2D+ crystals. **International Conference on Layered Materials and Devices: From Atoms to Chips**. (04/11/2025). Braga (Portugal), Juan José Palacios.
- 2 Advanced Atomic Force Microscopy: a tool for Nanoscience and Nanotechnology. **Sino-Spanish Joint Research Center in Advanced Materials: Kick-Off Meeting**. (22/09/2025). Madrid (Spain), Pablo Ares.
- 3 Advances in fundamental ElectroMagnetic properties of 2D materials: piezoelectricity, ferroelectricity, and magnetic shielding. **Nanoworkshop 2025**. (09/09/2025). La Rábida, Huelva (Spain), Pablo Ares.
- 4 Anomalous metal phase in Al-InAs nanowires due to inverse proximity effect. **Workshop on Superconductor, Disorder, Interactions and Quantum Technologies**. (10/06/2025). Salamanca (Spain), Eduardo Lee.
- 5 Charge Transport through Proteins and Peptide-Based Materials. **IEEE Nano 2025**. (14/07/2025). Washington DC (US), Linda Angela Zotti.
- 6 Chirality-Induced Spin Selectivity and Seebeck Effect in Helicenes. **IEEE Nano 2025**. (13/07/2025). Washington (US), Juan José Palacios.

- 7 Combining Ferroelectrics and 2D Materials for Nanophotonics. **OPTICS & PHOTONICS International Congress 2025 / Symposium: 11th Tiny Integrated Lasers and Laser Ignition Conference 2025**. (23/04/2025). Yokohama (Japón). Luisa E Bausá.
- 8 Conductance Oscillations in Helicene-Based Junctions. **IEEE Nano 2025**. (14/07/2025). Washington DC (US), Linda Angela Zotti.
- 9 Cooperative electron-vibron interactions in Surface-Enhanced Raman Scattering (SERS). **META 2025**. (23/07/2025). Málaga (Spain), Diego Martín Cano.
- 10 Dynamics of electric dipoles in fluctuating electromagnetic fields. **Donev**. (18/09/2025). Zaragoza (Spain), Manuel Marqués.
- 11 Electromagnetic field quantization in nanophotonic systems. **Strong Coupling with Organic Molecules, SCOM 2025**. (16/06/2025). Odense (Dinamarca), Antonio I. Fernández-Domínguez.
- 12 Electron delocalization in a 2D Mott insulator. **Deutsche Physikalische Gesellschaft (DPG) Spring Meeting 2025**. (18/03/2025). Regensburg (Germany), Amadeo L. Vázquez de Parga.
- 13 Electron delocalization in a 2D Mott insulator. **Microscopy at the frontiers of Science 2025 (MFS25)**. (26/09/2025). Valencia (Spain), Amadeo L. Vázquez de Parga.
- 14 Emergent topology by Landau level mixing in quantum Hall-superconductor nanostructures. **30th International Conference on Low Temperature Physics**. (13/08/2025). Bilbao (Spain), Alfredo Levy Yeyati.
- 15 Emergent topology by Landau level mixing in quantum Hall-superconductor nanostructures. **QTech Conference**. (24/09/2025). Budapest (Hungary), Alfredo Levy Yeyati.
- 16 Emergent topology by Landau level mixing in quantum Hall-superconductor nanostructures. **X Reunión Nacional de Sólidos**. (11/12/2025). San Carlos de Bariloche (Argentina), Alfredo Levy Yeyati.
- 17 Emulsion-Templated Vesicles: From Fundamentals to Applications. **10th Bubble and Drop Conference**. (11/06/2025). Prague (Czech Republic), Laura R. Arriaga.
- 18 Enhanced Second Harmonic Generation in 2D TMDs via Ferroelectric Substrate Engineering. **XXIII B-MRS Meeting**. (28/09/2025). Bahia (Salvador). Mariola O Ramirez.
- 19 From Fermi & Bose polaron polaritons to quantum droplets of light. **15th European Conference on Atoms Molecules and Photons (ECAMP15)**. (04/07/2025). Innsbruck, Austria. Francesca Maria Marchetti.
- 20 Fully differential photon statistics in complex nanophotonic systems. **MULTIPHOTONICS 2025**. (08/10/2025). Madrid (Spain), Johannes Feist.
- 21 Fully differential photon statistics in complex nanophotonic systems. **Quantum Correlated Light and Matter 2025**. (03/11/2025). Helsinki (Finland), Johannes Feist.
- 22 Graphene-based altermagnets. **Workshop on Altermagnets and School on Magnetic Symmetry**. (11/06/2025). Shanghai (China), Juan José Palacios.

- 23** How fluid membranes transduce forces into motion. **Soft Matter Science and Beyond: From Inert to Living Matter**. (04/06/2025). Benasque (Spain), Laura R. Arriaga.
- 24** Identifying Ce³⁺ Sites at the reduced CeO₂ (111) Surface: Role of water molecules and AFM imaging. **38th European Conference on Surface Science (ECOSS-38)**. (26.08.2025). Braga (Portugal), Rubén Pérez.
- 25** Integration of Ferroelectrics and 2D Materials for Nanophotonics. **49th International Conference and Exposition on Advanced Ceramics and Composites**. (27/01/2025). Daytona (US). Luisa Bausá.
- 26** Joule spectroscopy and heating effects in hybrid superconductor-semiconductor nanodevices. **30th International Conference on Low Temperature Physics**. (07/08/2025). Bilbao (Spain), Eduardo Lee.
- 27** Linear and non-linear optical response in 2D crystals with Xatu. **CINERAMA 2025**. (26/05/2025). San Sebastián (Spain), Juan José Palacios.
- 28** Magnetic Field Screening by 2D Materials. **2D Transition Metal Dichalcogenides (2D TMDs) 2025**. (23/07/2025). Cambridge (UK), Pablo Ares.
- 29** Magnetic Field Screening by 2D Materials. **I Reunión Española sobre Materiales Avanzados y Redes de Dispositivos en 2D (MARE2D)**. (18/06/2025). Valencia (Spain), Pablo Ares.
- 30** Magnetic Field Screening of Graphene, Graphene Oxide and MoS₂. **2D Transition Metal Dichalcogenides 2025 (2D TMDs 2025)**. (23/07/2025). Cambridge (UK), Pablo Ares.
- 31** Magneto-optical Particles in Isotropic Spinning Fields Mimic Magnetic Monopoles. **Nanoplasmeta 2025**. (23/02/2025). Oporto (Portugal), Manuel Marqués.
- 32** Mechanics of Defective 2D Materials. **10th Multifrequency AFM Conference**. (19/05/2025). Madrid (Spain), Cristina Gomez-Navarro.
- 33** Multiphoton emission from a single-photon source and Single-photon emission from multiple levels. **Physics of Light-Matter Coupling in Nanostructures 2025**. (10/04/2025). Xiamen (China), Elena del Valle Reboul.
- 34** Nanophotonics of time varying media. **CEN, Spanish Conference on Nanophotonics**. (11/06/2025). Madrid (Spain), Paloma Arroyo Huidobro.
- 35** Nanophotonics of time varying media. **Metamaterials**. (02/09/2025). Amsterdam (Netherlands) Paloma Arroyo Huidobro.
- 36** Nonlinear Optical Properties of 2D-Ferroelectric Heterostructures. **49th International Conference on Advanced Ceramics and Composites (ICAAC'25)**. (26/01/2025). Daytona Beach (US), Mariola O Ramirez.
- 37** Nucleation and early-stage growth of Li and Na anodes in ZESSBs at the nanoscale by synchrotron-PEEM and AFM. **10th Multifrequency AFM Conference**. (28/05/2025). Madrid (Spain), Celia Polop.
- 38** Nucleation and growth of Li and Na anodes at the nanoscale in ZESSBs. **5th World Conference on Solid Electrolytes for Advanced Applications: Garnets and Beyond (LLZO5WC)**. (28/05/2025). Stanford (US), Celia Polop

- 39** Nuevas microscopías Visualizando fenómenos colectivos en Física de la Materia Condensada. **Congreso de Estudiantes de Física de la Universidad de la Laguna**. (09/04/2025). Tenerife (Spain), Hermann Suderow.
- 40** Preparation of quantum emitter states with nanophotonics tools. **Multiphotonics 2025**. (08/10/2025). Madrid (Spain), Antonio I. Fernández-Domínguez.
- 41** Probing & tuning Rydberg excitons/polaritons in 2D semiconductors via a magnetic field. **8th International Workshop of Rydberg Excitons (Rydexc8)**. (17/06/2025). Toulouse (France), Francesca Maria Marchetti.
- 42** Quantum optical description of nanophotonic systems. **META 2025**. (24/07/2025). Torremolinos, (Spain), Johannes Feist.
- 43** Quantum optical description of nanophotonic systems. **PIERS 2025**. (07/11/2025). Chiba (Japan), Johannes Feist.
- 44** Quantum optical description of nanophotonic systems. **Quantum Nanophotonics 2025**. (25/03/2025). Benasque (Spain), Johannes Feist.
- 45** Quantum Optics with Organic molecules: Surface Enhanced Raman and THz single photons. **FISMAT2025**. (10/07/2025). Florence (Italy), Diego Martín Cano.
- 46** Quantum state preparation and the role of spatial symmetries in nanophotonics. Telluride **Workshop on Engineering Light-Matter Interactions: Nanostructures and Polaritons**. (14/07/2025). Telluride (US), Antonio I. Fernández-Domínguez.
- 47** Quantum State Preparation with Nanophotonics Tools. **Photoptics 2025**. (22/02/2025). Oporto (Portugal), Antonio I. Fernández Domínguez.
- 48** Quest for amorphous superconductors of Bi-Sb alloys by irradiation with swift heavy ions. **Topology and Geometry Beyond Perfect Crystals**. (30/05/2025). Stockholm (Sweden), Miguel Ángel Ramos.
- 49** 49. Reactivity in clusters of amino acids induced by ion-collisions in the gas phase. **ISIAC2025 – 29th International Symposium on Ion-Atom Collisions**. (25/07/2025). Kyoto (Japan), Sergio Díaz-Tendero.
- 50** Scanning tunneling microscopy and quasiparticle interference. Novel Phases, Superconductivity and Emergent Electronic Properties in Quantum Materials. (30/09/2025). Les Houches (France), Hermann Suderow.
- 51** Scanning tunneling microscopy at very low temperatures in heavy fermions. Flat Bands, Strong Correlations, and Heavy Fermions. (02/04/2025). Dresden (Germany), Hermann Suderow.
- 52** Scanning tunneling microscopy at very low temperatures in heavy fermions. Superconducting Nanodevices and Quantum Materials for Coherent Manipulation: Topological states in superconductors and magnetic materials. (08/05/2025). Prague (Czech Republic), Hermann Suderow.

- 53** Scanning tunneling microscopy in heavy fermions: New results in UTe₂. **Conference on Strongly Correlated Electron Systems (SCES 2025)**. (07/07/2025). Montreal (Canada), Hermann Suderow.
- 54** Self-Q-switched Plasmon assisted Nanolasing. **Optics & Photonics International Congress 2025 (TILA-LIC2025)**. (21/04/2025). Yokohama (Japan), Mariola O Ramirez.
- 55** Strong Electron-electron-nuclei Correlations in Multiphoton Single and Double Ionization: towards attochemistry. **Atomics Physics 2025 (ATOM2025)**. (24/11/2025). Dresden (Germany), Alicia Palacios.
- 56** Surface Charge Density Wave in UTe₂. **Advances in Solid State Physics and New Materials 30 years of the Center for Solid State Physics and New Materials**. (20/05/2025). Belgrade (Serbia), Hermann Suderow.
- 57** The boson peak and two-level systems in glasses and disordered crystals: a tale of two cities. **10th International Discussion Meeting on Relaxations in Complex Systems**. (21/07/2025). Barcelona (Spain). Miguel Angel Ramos.
- 58** The feedback driven atomic scale Josephson microscope. **Frontiers of Quantum Microscopy (FQM25)**. (24/09/2025). Oxford (UK), Hermann Suderow.
- 59** There is no ultrastrong coupling with photons. **PIERS 2025**. (07/11/2025). Chiba (Japan), Johannes Feist.
- 60** Ultrafast dynamics of ionized molecules and molecular clusters in the gas phase. **IMAMPC2025 – 14th International Meeting on Atomic and Molecular Physics and Chemistry**. (17/06/2025). Caen (France), Sergio Díaz-Tendero V.
- 61** Ultrastable glasses: The road to ideal glasses?. **TC03 meeting of the International Commission on Glass (ICG)**. (29/09/2025). Madrid, (Spain), Miguel Ángel Ramos.
- 62** Understanding and Breaking Barriers for Women in Science. **Physical Virology: across length scales**. (03/06/2025). Sant Feliu de Guíxols (Spain), Cristina Gomez-Navarro.
- 63** Unraveling Different Contributions to Spin Orbit Coupling in Superconductor/Ferromagnet Hybrids. **SolSkyMag2025**. (30/06/2025). San Sebastian (Spain), Farkhad Aliev Kazanski
- 64** Unraveling Different Contributions to Spin Orbit Coupling in Superconductor/Ferromagnet Hybrids. **SPINTRONICS XVIII**. (03/08/2025). San Diego (US), Farkhad Aliev.
- 65** Unraveling the potential of atomic force microscopy with DFT-based simulations and Deep Learning. **From Electrons to Atoms to Molecules and Materials (Lennard-Jones Centre / CECAM Meeting)**. (02.09.2025). Cambridge (UK), Ruben Perez.
- 66** Unraveling the potential of atomic force microscopy with DFT-based simulations and Deep Learning. **XIII Workshop on Applications of Scanning Probe Microscopy (STM/AFM 2025)**. (29.11.2025). Zakopane (Ponad), Ruben Perez
- 67** Using quantized light in new regimes. **Light-Matter Interaction: Focusing on Polariton Chemistry and Physics**. (26/05/2025). Vidin (Bulgaria), Johannes Feist.

ORGANIZATION OF CONGRESSES

1 **30th International Conference on Low Temperature Physics** (07/08/2025, Bilbao) Organizers: A.L. Yeyati, H. Suderow, S. Bergeret and F. Luis

2 **3rd Spanish Soft Matter 1 1/2 Day** (03/11/2025, Benasque) Organizers: Juan L. Aragones, Laura R. Arriaga, Alberto Fernandez-Nieves and Miguel Ruiz-Garcia.

3 **4th Edition Conference on Global Nanotechnology (NanoSeries)** (17/06/2025, Valencia) Organizers: Pablo Ares.

4 **European Workshop on Battery Interfaces: High-Resolution Techniques and Multiscale Modelling** (03/04/2025, Córdoba) Organizers: Celia Polop and Santhana Eswara.

5 **Fuerzas y túnel** (08/07/2025, Oviedo) Organizers: Mercedes Hernando, Jonathan Rodríguez, Dimas Oteigi, Bruno de la Torre and Eider Bergara.

6 **International Conference on Advanced Ceramics and Composites, ICACC 2025 / Symposium on Crystalline Materials for electrical, optical and medical applications** (26/01/2025, Daytona) Organizers: Luisa Bausá

7 **IX Spanish Conference on Nanophotonics (CEN2025)** (19/06/2025, Madrid) Organizers: Luisa Bausá and Mariola O Ramirez.

8 **Low-Temperature Quantum Detectors: from fundamentals to applications** (03/08/2025, Helsinki) Organizers: Peter Makk, Chuan Li, Jose Lado, Vitaly Shumeiko, Alfredo Levi-Yeyati, Miroslav Grajcar, Yasunobu Nakamura, J. S. Tsai, Yang Yu and Hermann Suderow.

9 **MAGNONICS 2025** (28/07/2025, Mallorca) Organizers: IFIMAC and Universidad de Munster

10 **Molecular Polaritonics** (21/09/2025, Miraflores de la Sierra) Organizers: Johannes Feist, Costanza Tonineli, Claudiu Genes and Paloma A. Huidobro.

11 **NanoSeries2025, 4th Edition Conference on Global Nanotechnology** (17/06/2025, Valencia) Organizers: Pablo Ares.

12 **Quantum and Nonlinear Optics Topical Meeting, European Optical Society Anual Meeting** (24/08/2025) Organizers: European Optical Society.

13 **Quantum Matter 2025** (20/05/2025, Grenoble) Organizers: Alfredo Levy Yeyati.

14 **Spanish Conference on Nanophotonics** (10/06/2025, Madrid) Organizers: Luisa Bausa and Mariola Ramírez.

15 Special session "Molecular conductors: spin filtering and thermoelectric properties " within IEEE Nano2025 (13/07/2025, Washington DC) Organizers: Linda A. Zotti and Carlos Sabater.

16 Superconducting Nanodevices and Quantum Materials for Coherent Manipulation: Topological states in superconductors and magnetic materials (06/05/2025, Liblice Chateau) Organizers: Hermann Suderow, Francesco Tafuri, Anna Böhmer, Beena Kalisky and Szabolcs Csonka.

17 Symposium Materials and Methods for Quantum Technologies, Bienal de Física (15/07/2025, San Sebastián) Organizers: Hermann Suderow, Edwin Herrera, Katerina Vaxevani, José Ignacio Pascual and Javier Aizpurua.

18 Ultrafast phenomena in Chemistry: Laser-matter interactions at the femto- and atto-second time scales (19/05/2025, Zaragoza) Organizers: Alicia Palacios and Felipe Zapata

19 Waves in Time Varying Media (20/05/2025, Madrid) Organizers: Paloma Arroyo Huidobro, Emanuele Galiffi, Riccardo Sapienza, Yonatan Sivan and Iñigo Liberal.

20 XXIII Brazilian Material Research Society Meeting 2025 (B-MRS 2025) (28/09/2025, Salvador de Bahia)

SPONSORSHIPS

1 3rd Spanish Soft Matter Day (Benasque, 2nd to 5th November 2025) organized by J. Aragonés (IFIMAC), L. Arriaga (IFIMAC), A. Fernández-Nieves (UB - ICREA) and M. Ruiz-García (UCM). More information: <https://www.benasque.org/2025ssm/>

3 IX Spanish Conference on Nanophotonics (Madrid, 10th to 13 June 2025) organized by Luisa Bausa and Mariola Ramírez. More information <https://www.benasque.org/2025cen/>

5 Fuerzas y Túnel 2025 (Oviedo, 8th to 11th July 2025) organized by IFIMAC. More information <https://fyt2025.com/>

7 QUANTUMatter 2025 (Grenoble, 20th to 23th May 2025) organized by Phantoms Foundation. More information: <https://www.quantumconf.eu/2025/program.php>

2 30th International Conference in Low Temperature Physics (Bilbao, 7th to 11th August 2025) organized by IFIMAC, DIPC, Nanogune, CFM, INMA, BasqueQ and UPV/EHU. More information: <https://www.lt30.es/>

4 European Workshop on Battery Interfaces: High-Resolution Techniques and Multiscale Modelling (Córdoba, 3th to 4th April 2025) organized by ASEVA. More information: <https://aseva.es/european-workshop-on-battery-interfaces/>

6 Molecular Polaritonics 2025 (Madrid, 21th to 25th September) organized by IFIMAC. More information: <https://molecularpolaritonics.org>

TRANSFER ACTIVITIES



Patent applications

1 Dispositivo de redireccionamiento de haz múltiple basado en nanoantenas ópticas plasmónicas

Manuel Marqués Ponce, María Carmen Vázquez García and Alicia Fresno Hernández.

Application number: PCT/ES2025/070343
UC3M & UAM

2 Material poroso de red-metal orgánica fluorinada y uso del mismo

Ana Eva Platero Prats, Edouardos Loukopoulos and Sergio Marugán Benito.

Application number: 202530757
UAM

3 Método de fabricación de material recubierto, material recubierto, sistema, aplicaciones y usos

Félix Zamora Abanades, Julio Gómez Herrero, Guillermo Hernanz Borrego and David Rodríguez San Miguel,

Application number: 202530508
UAM



UAM Emprrende

Between 2022 and 2025, IFIMAC researchers participated in the UAM Emprrende Investiga programmes across the General, Industry, and Health tracks. These activities demonstrate a sustained commitment to research valorisation, knowledge transfer, market validation, and entrepreneurship-oriented innovation:

1. **Juan Luis Aragonés Gómez:** Health Programme (2025)
2. **Rafael Delgado Buscalioni:** Industry Programme (2024)
3. **Snezana Lazic:** Industry Programme (2024)
4. **Juan José Palacios Burgos:** Industry Programme (2024)
5. **Rubén Pérez Pérez:** Industry Programme (2024)
6. **Antonio Picón Álvarez:** Industry Programme (2024)
7. **Saül Vélez Centoral:** Industry Programme (2024)
8. **Félix Zamora Abanades:** General Programme (2023)
9. **David Míguez Gómez:** General Programme (2022)



Knowledge-based Companies

During the period 2022–2025, one Knowledge-Based Company (KBC) has been established: Porous Energy Technologies S.L.



Article 60

During 2025, 4 agreements were concluded under Article 60, for a total amount of €116,454.30.

AWARDS

Ranking of the World Scientists: World Top 2% Scientists by Stanford University

16.47% IFIMAC researchers are among the most influential in the world, following the publication of the latest edition of the "Ranking of the World Scientists: World Top 2% Scientists," compiled by Stanford University and the consulting firm Elsevier.



Félix Zamora



Francisco José
García Vidal



Elena del Valle



Juan Carlos
Cuevas



Rubén
Pérez



Alfredo Levy



Pedro José de
Pablo



Fernando Flores



Luis Viña



Pedro Tarazona



Johannes Feist

Paula Mori, Ana Platero and Félix Yndurain



More information: <https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/8>

Prof. Francisco José García-Vidal receives the REAL SOCIEDAD ESPAÑOLA DE FÍSICA – FUNDACIÓN BBVA 2025 Medal of the Royal Spanish Society of Physics.

The jury recognized his outstanding career in nanophotonics, plasmonics, and metamaterials. His key achievements include advances in light manipulation with applications in sensors and communications, novel mechanisms for light-driven molecular modification relevant to solar cells and chemical reactions, and his ability to inspire experimental groups to verify his theoretical predictions.



Link to interview by Fundación BBVA:
https://www.youtube.com/watch?v=87g-7Btwb_I

Prof. Julio Gómez Herrero receives the REAL SOCIEDAD ESPAÑOLA DE FÍSICA – FUNDACIÓN BBVA 2025 Physics, Innovation and Technology Award.

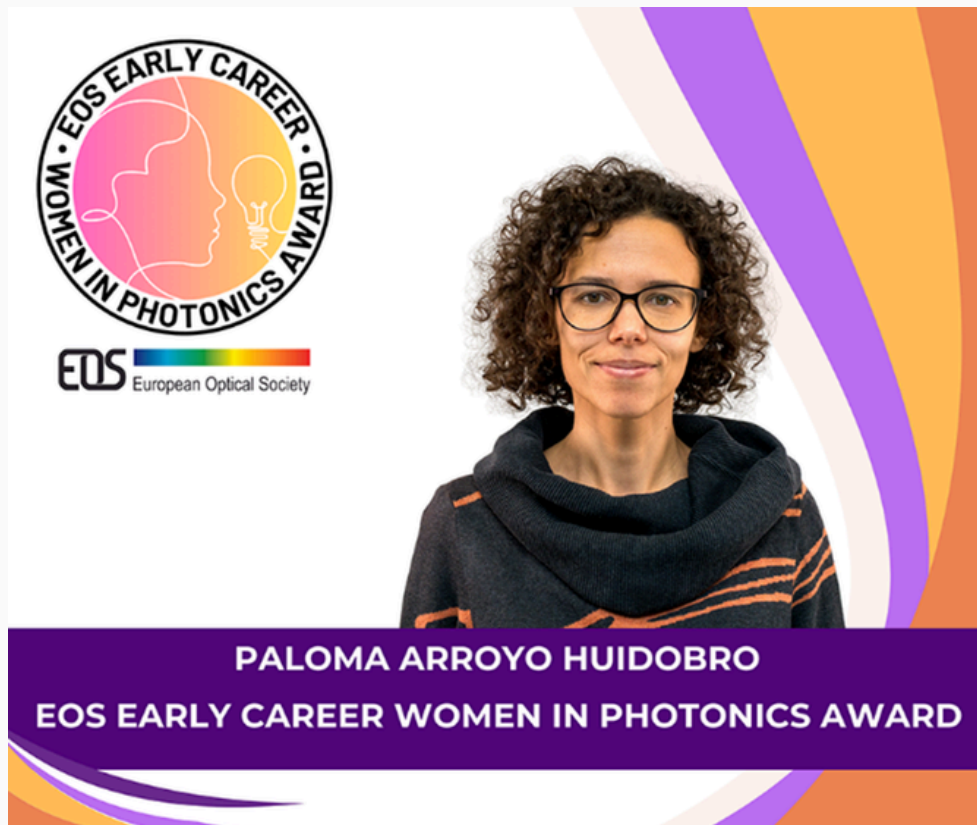
This award recognizes his pioneering work in nanotechnology, particularly his development of advanced instruments for atomic-scale research. His innovations have spawned technology companies and benefited academic researchers and industries in electronics, healthcare, and energy



Link to interview by Fundación BBVA:
<https://www.youtube.com/watch?v=fJ5ygosLDNI&t=6s>

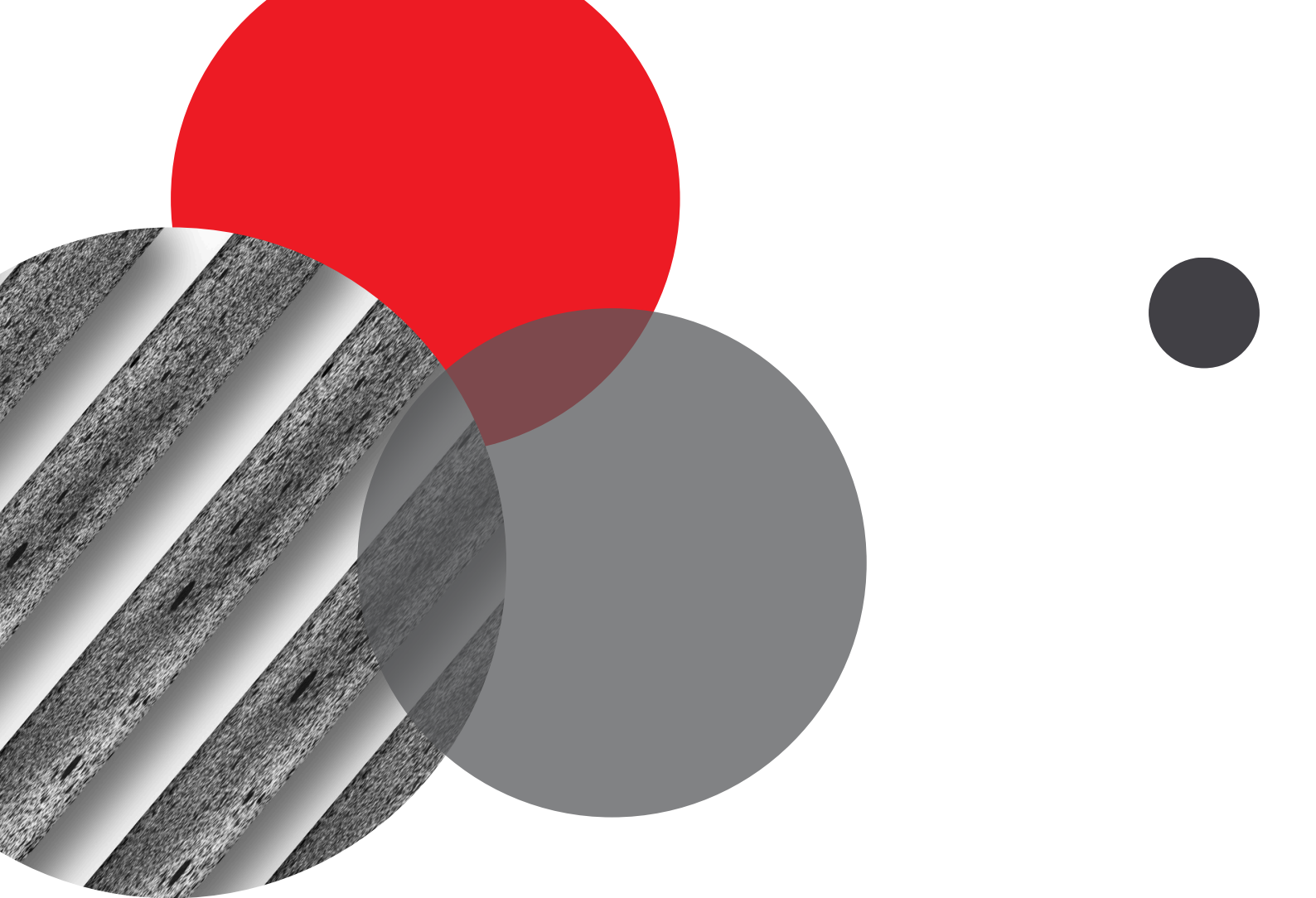
Paloma Arroyo Huidobro receives the EOS Early Career Women in Photonics Award and the UAM Young Researcher Award in Mathematical Sciences and Theoretical Physics

Both awards recognize Paloma's contributions as a young researcher exploring light-matter interactions in time-varying, topological and quantum nanophotonics. She is ERC Starting Grant awardee and Ramón y Cajal Fellow at IFIMAC and the Condensed Matter Theory Department at UAM.



Link to the web:

<https://www.europeanoptics.org/pages/distinctions/awards/early-career-women.html>



5

TRAINING ACTIVITIES

PREDOCTORAL FELLOWSHIPS PROGRAM OF THE SPANISH AEI

Through the María de Maeztu Unit of Excellence approved in 2024, IFIMAC has secured six FPI grants. In 2024, two positions were announced, and the selected students will join us in January 2025. In 2025, the remaining four positions were announced, and the selected candidates joined IFIMAC in January 2026.

Call resolution 2024:



RESOLUCIÓN DE 6 DE NOVIEMBRE DE 2024 DE LA RECTORA DE LA UNIVERSIDAD AUTÓNOMA DE MADRID POR LA QUE SE RESUELVE LA CONVOCATORIA PÚBLICA DE 2 CONTRATOS PREDOCTORALES PARA LA FORMACIÓN DE DOCTORES CORRESPONDIENTES A LAS ACTUACIONES PARA LA FORMACIÓN DE PERSONAL INVESTIGADOR PREDOCTORAL DEL CENTRO DE INVESTIGACIÓN DE FÍSICA DE LA MATERIA CONDENSADA, ENMARCADAS EN LA CONVOCATORIA DE CONCESIÓN DE ACREDITACIONES Y AYUDAS PÚBLICAS DE «CENTROS DE EXCELENCIA SEVERO OCHOA» Y DE «UNIDADES DE EXCELENCIA MARÍA DE MAEZTU», EN EL MARCO DEL PLAN ESTATAL DE INVESTIGACIÓN CIENTÍFICA, TÉCNICA Y DE INNOVACIÓN 2021-2023.

Por Resolución de 1 de octubre de 2024 se efectuó la convocatoria pública de 2 contratos predoctorales para la formación de doctores correspondientes a las actuaciones para la formación de personal investigador predoctoral del centro de investigación de física de la materia condensada, enmarcadas en la convocatoria de concesión de acreditaciones y ayudas públicas de «Centros de Excelencia Severo Ochoa» y de «Unidades de Excelencia María de Maeztu», en el marco del plan estatal de investigación científica, técnica y de innovación 2021-2023.

Finalizado el proceso de selección conforme a lo establecido en los apartados 2 y 5 de las bases de la Convocatoria y vista la propuesta formulada por la Comisión de Valoración, este Rectorado en uso de sus atribuciones conferidas en el artículo 50.1 de la Ley Orgánica del Sistema Universitario 2/2023, de Universidades y en particular por el artículo 40 de los Estatutos de la UAM, HA RESUELTO:

PROPONER COMO CANDIDATO/A TITULAR DE LA PLAZA 1ª A, JAVIER CASTRO LUACES

PROPONER COMO CANDIDATO/A TITULAR DE LA PLAZA 2ª A, TERESA ESPINOSA GONZÁLEZ

PROPONER COMO SUPLENTES A:
CHRISTOS PASPALIDES,
DOMINGO DE GUZMÁN OREIRO GÁMEZ,
PABLO HERNÁNDEZ MARTÍN,
PAULA OHLADEN AGUILERA y
HAMED MEHDI

De no formalizar el contrato en plazo establecido, por causa imputable a el/la interesado/a, el/la candidata/a decaerá en su derecho.

Contra la presente Resolución, que pone fin a la vía administrativa, podrá interponerse recurso contencioso-administrativo ante los Juzgados de lo Contencioso-Administrativo de Madrid, en el plazo de dos meses desde el día siguiente a la fecha de su publicación. Sin perjuicio de lo anterior, la presente Resolución podrá ser recurrida potestativamente mediante recurso de reposición ante el Rector de esta Universidad en el plazo de un mes desde el día siguiente a dicha publicación. En este caso no podrá interponerse recurso contencioso-administrativo hasta que no sea resultado expresamente o se haya producido la desestimación presunta del recurso de reposición interpuesto, de conformidad con lo dispuesto en los artículos 123 y 124 de la Ley 39/2015, de 1 de octubre, del Procedimiento Administrativo Común de las Administraciones Públicas.

Madrid, 6 de noviembre de 2024

LA RECTORA

P.D.: El Vicerrector de Política Científica,
(Resolución de 02/07/2021, BOCM de 08/07/2021)

Daniel Jaque García



More information:

https://www.uam.es/ssdlv/Satellite?c=BASE_Investig_C&cid=1606963642603&pagename=UAM-R%2FBASE_Investig_C%2FDetalle



Código Seguro De Verificación	6538-4838-4E4CP5647-4733	Fecha	06/11/2024	
Firmado Por	Daniel Jaque García - Vicerector - Vicerrectorado de Política Científica (En funciones)			
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		Página	1/1	

Universidad Autónoma de Madrid

MINISTERIO DE CIENCIA, INNOVACIÓN Y UNIVERSIDADES

RESOLUCIÓN DE 17 DE NOVIEMBRE DE 2025 DE LA UNIVERSIDAD AUTÓNOMA DE MADRID POR LA QUE SE RESUELVE LA CONVOCATORIA PÚBLICA DE 4 CONTRATOS PREDOCTORALES PARA LA FORMACIÓN DE DOCTORES CORRESPONDIENTES A LAS ACTUACIONES PARA LA FORMACIÓN DE PERSONAL INVESTIGADOR PREDOCTORAL DEL CENTRO DE INVESTIGACIÓN DE FÍSICA DE LA MATERIA CONDENSADA, ENMARCADAS EN LA CONVOCATORIA DE CONCESIÓN DE ACREDITACIONES Y AYUDAS PÚBLICAS DE «CENTROS DE EXCELENCIA SEVERO OCHOA» Y DE «UNIDADES DE EXCELENCIA MARÍA DE MAETZU», EN EL MARCO DEL PLAN ESTATAL DE INVESTIGACIÓN CIENTÍFICA, TÉCNICA Y DE INNOVACIÓN 2021-2023.

Por Resolución de 1 de octubre de 2025 se efectuó la convocatoria pública de 4 contratos predoctorales para la formación de doctores correspondientes a las actuaciones para la formación de personal investigador predoctoral del centro de investigación de física de la materia condensada, enmarcadas en la convocatoria de concesión de acreditaciones y ayudas públicas de «Centros de Excelencia Severo Ochoa» y de «Unidades de Excelencia María de Maetzu», en el marco del plan estatal de investigación científica, técnica y de innovación 2021-2023.

Finalizado el proceso de selección conforme a lo establecido en los apartados 2 y 5 de las bases de la Convocatoria y vista la propuesta formulada por la Comisión de Valoración, este Rectorado en uso de sus atribuciones conferidas en el artículo 50.1 de la Ley Orgánica del Sistema Universitario 2/2023, de Universidades y en particular por el artículo 40 de los Estatutos de la UAM, HA RESUELTO:

PROPONER COMO CANDIDATO/A TITULAR DE LA PLAZA 1ª A, LUCÍA ROMERO SÁNCHEZ

PROPONER COMO CANDIDATO/A TITULAR DE LA PLAZA 2ª A, ALEJANDRO SEBASTIÁN GÓMEZ GÓMEZ

PROPONER COMO CANDIDATO/A TITULAR DE LA PLAZA 2ª A, TOMÁS MIGUEL SINTES PINEDA

PROPONER COMO CANDIDATO/A TITULAR DE LA PLAZA 2ª A, GUALBERTO MIGUEL LEÓN CUESTA

PROPONER COMO SUPLENTE A:

SUPLENTE 1. ÁLVARO GALLEGO DE ROA
SUPLENTE 2. DOMINGO DE GUZMAN ORERO GAMEZ
SUPLENTE 3. JOAN JAVIER RONQUILLO TUTIVIN
SUPLENTE 4. PABLO DIEZ SILVA
SUPLENTE 5. ALEJANDRO SANJURJO MORENO
SUPLENTE 6. ADRIAN CAMARA BALLESTEROS
SUPLENTE 7. GEMMA NAVARRO MARTÍNEZ
SUPLENTE 8. PABLO HERNÁNDEZ MARTÍN
SUPLENTE 9. THOMAS GELFERT
SUPLENTE 10. PABLO TUERO ALVAREZ
SUPLENTE 11. JAIME MARTÍNEZ-ALMEIDA ORDÁS
SUPLENTE 12. ELENA SENDARRUBIAS ARIAS-CAMISÓN
SUPLENTE 13. OSCAR BOU MARQUES
SUPLENTE 14. MEHDI HAMED
SUPLENTE 15. AHMET KUTAY OZYURT
SUPLENTE 16. DIEGO HENRIQUEZ GUGLIOTTA
SUPLENTE 17. DENNIS CACIAGO PILLAJO
SUPLENTE 18. JAIME RUMEU OZORES

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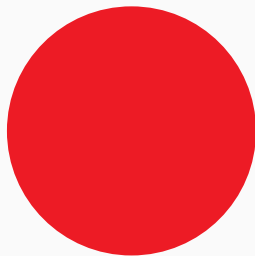
De no formalizar el contrato en plazo establecido, por causa imputable a el/la interesado/a, el/la candidata/a decaerá en su derecho.

Contra la presente Resolución, que pone fin a la vía administrativa, podrá interponerse recurso contencioso-administrativo ante los Juzgados de lo Contencioso-Administrativo de Madrid, en el plazo de dos meses desde el día siguiente a la fecha de su publicación. Sin perjuicio de lo anterior, la presente Resolución podrá ser recurrida potestativamente mediante recurso de reposición ante el Rector de esta Universidad en el plazo de un mes desde el día siguiente a dicha publicación. En este caso no podrá interponerse recurso contencioso-administrativo hasta que no sea resultado expresamente o se haya producido la desestimación presunta del recurso de reposición interpuesto, de conformidad con lo dispuesto en los artículos 123 y 124 de la Ley 39/2015, de 1 de octubre, del Procedimiento Administrativo Común de las Administraciones Públicas.

Madrid, 17 de noviembre de 2025

La Rectora, P.D. La Vicerrectora de Política Científica
(Resolución de 02/07/2025, BOCM de 10/07/2025)

Mª Ángeles Martín Cebrejas



MASTER AND DOCTORATE PROGRAMS

IFIMAC members are actively involved in the **Master Programs**:

- Máster Universitario en Física de la Materia Condensada y de los Sistemas Biológicos.
- Máster Universitario en Química Teórica y Modelización Computacional.
- Máster Universitario en Materiales Avanzados, Nanotecnología y Fotónica.
- Máster Universitario en Química Aplicada.

And in the **Doctorate programs**:

- Física de la Materia Condensada, Nanociencia y Biofísica.
- Programa de Doctorado en Materiales Avanzados y Nanotecnología.
- Química Teórica y Modelización Computacional.
- Química Aplicada.

IFIMAC'S MASTER GRANTS

IFIMAC has offered 10 grants for the best students starting the **Masters of Condensed Matter Physics** within UAM.

2024/2025 course: five Master grants awarded.

de la Fuente Pico, David. TFM Supervisor: Marchetti, Francesca

Planelles Prensa, Pablo. TFM Supervisor: Pou Bell, Pablo

Rodríguez Fernández, Asensio. TFM Supervisor: Picón, Antonio

Romero Sánchez, Lucía. TFM Supervisor: Brihuega, Iván

Sintes Pineda, Tomás Miguel. TFM Supervisor: Cuevas, Juan Carlos



More information: <https://www.ifimac.uam.es/jobs-opportunities/ifimacs-master-grants-for-2024-2025/>

2025/2026 course: five Master grants awarded.

Cascales Álvarez, Ismael. TFM Supervisor: Félix Zamora Abanades y Raquel Gavara Castell

Estrela Ferrandis, Andreu. TFM Supervisor: Hermann Suderow

Juárez Leardini, Antonio. TFM Supervisor: David Miguez Gomez

López Rodríguez, Alberto. TFM Supervisor: Salvatore Assenza

Rodríguez Guzmán, María José. TFM Supervisor: Celia Polop Jorda



More information: <https://www.ifimac.uam.es/jobs-opportunities/ifimacs-master-grants-for-2025-2026/>

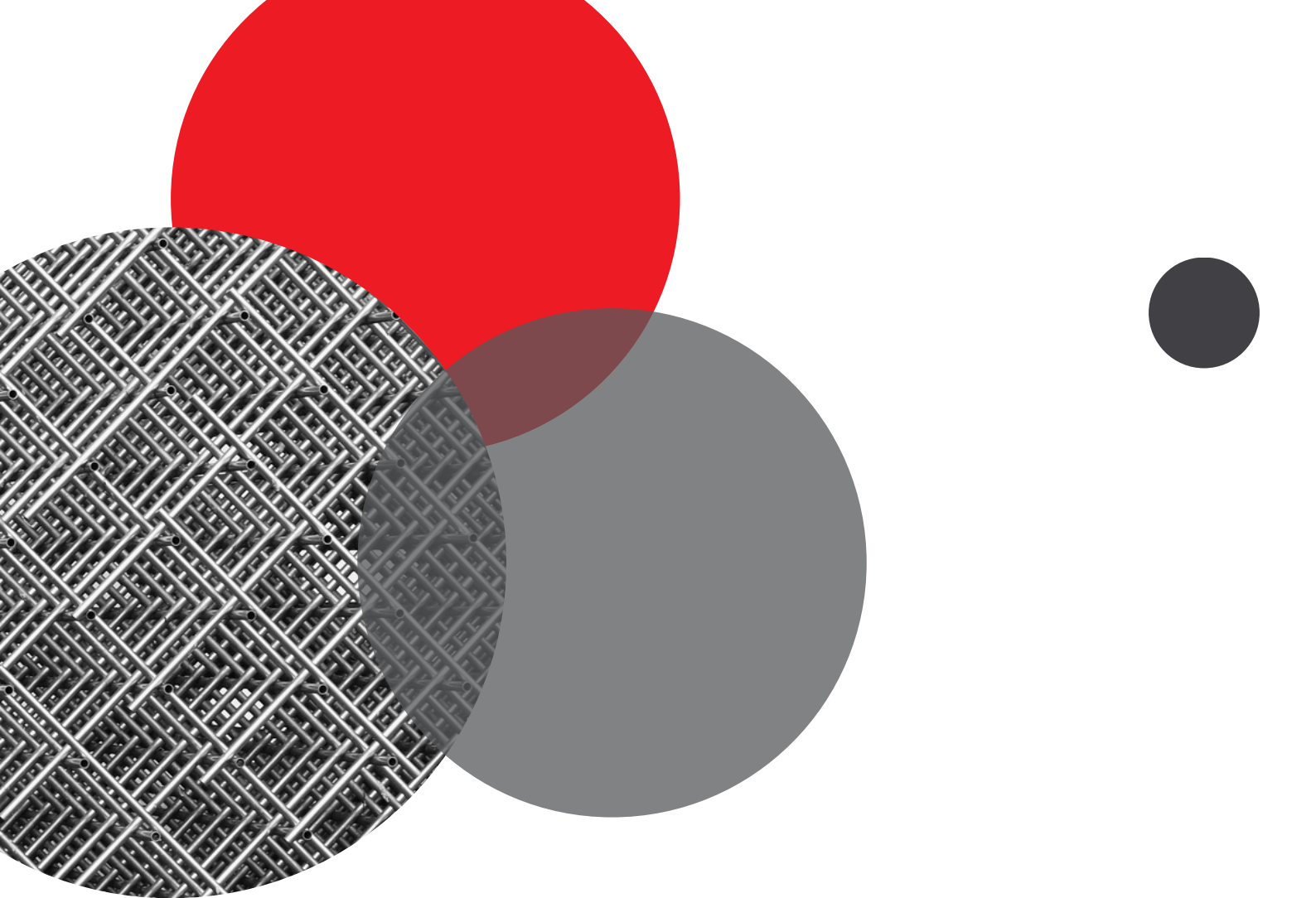
RESEARCH AWARDS FOR PHYSICS STUDENTS

The Condensed Matter Physics Center provides two of the six awards called by The Nicolás Cabrera Institute. The candidates awarded by IFIMAC in the 2025 edition are Juan Manuel Sánchez Arrua and Lucía Echevarría Soto.



More information: <https://www.inc.uam.es/list-awards-2025/>





6



OUTREACH ACTIVITIES

SCIENCE OUTREACH ACTIVITIES



International Day of Women and Girls in Science 2025

To celebrate the 10th anniversary of the International Day of Women and Girls in Science, IFIMAC organised its third science fair on 8 February at the Science faculty in Cantoblanco campus.

The fair aimed to foster curiosity and enthusiasm for science among the general public, particularly families with children. The event also highlighted the scientific contributions of women at IFIMAC and its students, and recognised the achievements of pioneering women in the history of science.

The 2025 programme included hands-on activities for participants of all ages, such as creating waves with musical instruments and prisms, exploring light polarisation for bee navigation, levitating objects with superconducting magnets, building batteries from lemons, recreating Eunice Foote's greenhouse effect experiment, observing objects disappearing in water through refraction and inflating objects with dry ice sublimation.

By working alongside IFIMAC researchers during these demonstrations, visitors of all ages developed intuitive understanding of complex physical principles through direct participation and observation.

Día Internacional de
la Mujer y la Niña
en la Ciencia 2026



IFIMAC
te invita a disfrutar
de sus talleres

La física en tus manos

Sábado
7 Feb

Para todos los públicos
11:00 - 14:00h
Facultad de Ciencias, UAM
C/ Francisco Tomás y Valiente 7
Campus Cantoblanco



Link to video:
https://youtu.be/tEaH-aE6_00





Workshop “Good Vibrations: The Physics of Music” - Majadahonda Professional Music Conservatory

During the Cultural Week 2025 programme at Majadahonda Professional Music Conservatory, physicist Francesca Maria Marchetti conducted an interactive workshop titled “Good Vibrations: The Physics of Music” on 4 April. The workshop enabled participants to engage with the fundamental scientific principles governing musical acoustics. Attendees examined the acoustic properties that differentiate instrumental timbral characteristics and explored the theoretical frameworks underlying harmonic phenomena. Through practical demonstrations, participants observed how key concepts—including standing waves, acoustic resonance, and Fourier analysis—elucidate the acoustic behaviour of diverse instruments, encompassing both the complex tonal qualities of stringed instruments and the characteristic resonance profiles of wind instruments. This interdisciplinary approach, integrating acoustical physics with musicological principles, illustrated that music fundamentally constitutes the deliberate application of vibrational phenomena to generate sound.



Workshops at Instituto de Libre Enseñanza (ILE)

As part of an ongoing collaboration with the Instituto de Libre Enseñanza of the Fundación Giner, IFIMAC PhD students led a series of workshops in Madrid. Through hands-on experiments, participants explored fundamental physics concepts spanning optics, soft matter, density, and waves.

On January 11, Amalia Coro presented “Optics: Photonics in Your Everyday Life,” introducing key photonics concepts. Berta Tinao followed on January 18 with “Soft Matter: Gummy Bears for Acid Detection,” while Aitor Zambuido led an interactive session on November 15 titled “Archimedes and Flotation: Density and Changes of State.” Before finalizing 2025, on December 13, master’s students Lucía Romero and Arianna Barreto from UAM presented “Waves and Music,” engaging participants with the physics behind sound and vibration.

This collaboration will continue with an additional workshop scheduled for early 2026.



Aprender ciencia / Hacer ciencia (en torno a la simbiosis)

Talleres

Actividades infantiles (de 7 a 12 años)

Descubrir, aprender, experimentar...
Diciembre 2024 – Enero 2025

14 diciembre, sábado
de 10.30 a 13.30 h

Transformando la materia: cambios de estado y materiales bidimensionales

Con Beatriz Vela Bausá
Graduada en Física y doctoranda en el
departamento de Física de la Materia
Condensada IFMAC – Universidad
Autónoma de Madrid

En este taller descubriremos cómo la materia puede transformarse a través de dos fenómenos fascinantes: los cambios de estado (como la vaporización y la sublimación) y el paso del mundo microscópico al macroscópico. A través de experimentos interactivos, los participantes observarán de cerca fenómenos como la sublimación del hielo seco y aprenderán cómo se puede transformar el grafito, un material tridimensional, en capas bidimensionales de grafeno. Descubriremos algunos de los secretos que hay detrás de los efectos especiales en el cine de fantasía y prepararemos un material bidimensional para observar bajo un microscopio.

11 enero, sábado
de 10.30 a 13.30 h

Óptica: la fotónica en tu día a día

Con Amalia Coro González
Graduada en Química y doctoranda en el
departamento de Física de la Materia
Condensada IFMAC – Universidad
Autónoma de Madrid

Este taller sobre fotónica servirá para explorar aspectos fascinantes de la física de la luz. Descubriremos por qué las alas de las mariposas y las plumas del pavo real tienen colores tan brillantes y aprenderemos cómo se usan estos efectos en dispositivos fotónicos y en objetos tan cotidianos como las cartas Pokémon! Además, trabajaremos sobre la fluorescencia, sus propiedades y sus aplicaciones prácticas, convirtiéndonos en artistas que pintan en la oscuridad.

18 enero, sábado
de 10.30 a 13.30 h

Materia blanda: gominolas para detectar ácidos

Con Berta Tinaz Nieto
Doctora en Física, especializada en física
biológica y de la materia blanda.
IFMAC – Universidad Autónoma de Madrid

El objetivo del taller es introducirnos en la física de la materia blanda, más concretamente en los hidrogeles y como estas estructuras se encuentran muy presentes en nuestro día a día. En particular, durante la actividad formaremos un hidrogel con los mismos componentes que las gominolas. Además, se usarán los geles para encapsular en su interior el agua de color tornasol, un detector de acidez natural que cambia de color dependiendo del grado de acidez del medio con el que se mezcle.

Plazas limitadas.
Imprescindible inscripción previa pinchando aquí

PRECIO DE INSCRIPCIÓN:
Cada taller: 10 €
50% de descuento para los miembros de la Corporación de Antiguos Alumnos y Amigos de la ILE, y Amigos de la Residencia de Estudiantes

Coordinador:

LUGAR DE REALIZACIÓN DE LOS TALLERES
Institución Libre de Enseñanza
Paseo del General Martínez Campos, 14. 28010 Madrid
www.fundacionile.org

MÁS INFORMACIÓN
Silvia Basanta. Tfn: +34 626 662 218
escuelaentempore@fundacionile.org

Organiza:



Aprender ciencia / Hacer ciencia (enraizando)

Talleres científicos

Actividades infantiles (de 7 a 12 años)

Descubrir, aprender, experimentar... en la ILE
Noviembre / Diciembre 2025 / Febrero 2026

15 Noviembre, sábado
de 10.30 a 13.30 h.

Arquímedes y la flotación: densidad y cambios de estado

Con Aitor Zambudio Sepúlveda
Graduado en Física y doctorando en el
departamento de Física de la Materia
Condensada IFMAC – Universidad
Autónoma de Madrid

A partir de experimentos interactivos, se trabajará con la densidad, de forma que los participantes resolverán cuestiones relacionadas con la flotabilidad de los barcos en el mar, mientras que las piedras y las conchas se hunden, o sobre cómo un globo aerostático puede volar por el cielo. Jugarémos con diferentes líquidos para descubrir cuáles tienen una mayor densidad y cómo hacer capas de colores sin que se mezclen. Además, experimentaremos cómo cambia la densidad cuando los materiales cambian de estado sólido a líquido o a gas.

13 Diciembre, sábado
de 10.30 a 13.30 h.

Ondas y música

Con Lucía Romero Sánchez
Graduada en Física e investigadora en el departamento de Física de la Materia Condensada IFMAC – Universidad Autónoma de Madrid

y Arianna Barreto Padrón
Graduada en Física y en Enseñanzas
Profesionales de la Música por el
Conservatorio Profesional de Música de las Palmas de Gran Canaria (CPMPLG)

¿Qué tienen en común el sonido y la luz? Los participantes explorarán los conceptos de frecuencia y armonía, observando algunos patrones extraños que se forman en cuerdas o placas vibrantes. Tocando varios instrumentos musicales, indagaremos en por qué se forman las olas o por qué en el espacio exterior no se escucha nada. Además, descubriremos cómo la luz también es una onda y que los colores del arcoíris son sus "notas musicales".

1 Febrero, domingo
de 10.30 a 13.30 h.

Cargándose de energía: electricidad y baterías

Con Lucía Mejía Sáez
Graduada en Física.
Universidad Autónoma de Madrid

El objetivo es acercarse al mundo de la energía, sus ventajas y sus consecuencias, como el cambio climático. Trabajaremos sobre los principios básicos de la energía y sus diferentes tipos, con demostraciones interactivas. En especial, nos centraremos en la electricidad, intentando encender una luz de diferentes formas y con objetos tan cotidianos como un lápiz o unas monedas.

Plazas limitadas.
Imprescindible inscripción previa pinchando aquí

PRECIO DE INSCRIPCIÓN:
Taller: 10 €
50% de descuento para los miembros de la Corporación de Antiguos Alumnos y Amigos de la ILE, y Amigos de la Residencia de Estudiantes

Coordinador:

LUGAR DE REALIZACIÓN
Institución Libre de Enseñanza
Paseo del General Martínez Campos, 14. 28010 Madrid
www.fundacionile.org

MÁS INFORMACIÓN
Silvia Basanta e Iñaki Díaz Delgado
Tfn: +34 662 914 147 / 91 411 97 22
escuelaentempore@fundacionile.org

Organiza:



Workshop at AMACI

Ten students from primary school took part in a workshop called "From the Greenhouse Effect to Renewable Energy: A Scientific Journey Inspired by Eunice Foote," which was organised by physics students Emma López, Miriam Moreno, Lucía Mejía, Josune Sarasa, Cristina López, Valentina Maza and Flor Magalí. They worked together with the Asociación Madrileña de Altas Capacidades Intelectuales (AMACI) to teach basic scientific ideas about climate science and renewable energy systems. Participants learned about Eunice Foote, a scientist who did important work in the greenhouse effect over 160 years ago. By doing Foote's experiments, students found out how CO2 is affecting climate. They also explored different types of renewable energy technology and did some practical experiments, such as building a battery.





Workshops with Cáritas - The Science Behind Climate Change

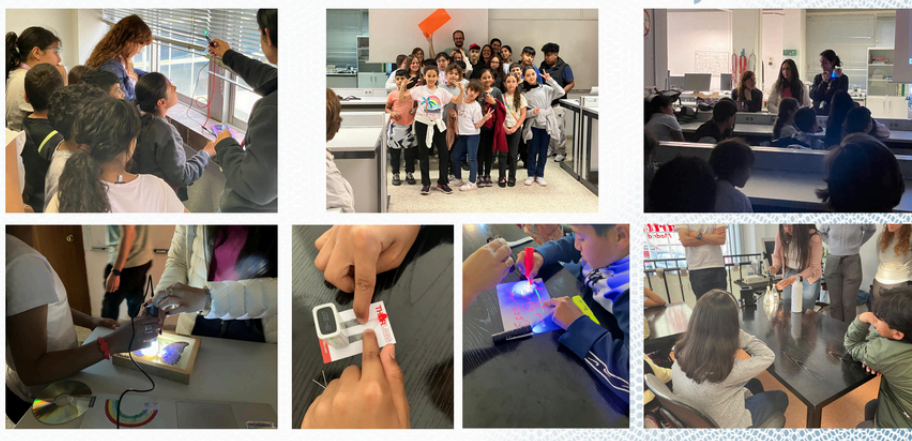
Over three sessions, Amalia Coro, Antonella Cutrupi, Raquel Utrera Melero, and Ferry Prins engaged participants in exploring climate change and renewable energy through interactive activities. These workshops were part of the Researchers at Schools (RAS) initiative, hosted during European Researchers' Night Madrid 2024-2025, a project run by the Universidad Autónoma de Madrid.

Primary and secondary school students replicated Eunice Foote's classic experiment to understand how carbon dioxide affects our atmosphere and drives climate change. The workshops also examined the connections between energy systems and climate events, with attendees learning how renewable energy technologies can generate power. A university visit gave students firsthand exposure to active research environments and scientific equipment, providing insight into professional scientific practice.

Through these experiences, the organizers hoped to inspire scientific curiosity and encourage students to consider careers in science.

IfiMAC Outreach
Condensed Matter Physics Center

**EXCELENCIA
MARÍA
DE MAEZTU**



European Researchers Night 2025

On September 26th, the Main Plaza of the Cantoblanco campus hosted European Researchers' Night 2025, with IFIMAC contributing the interactive activity "Transform Yourself with Energy." Led by a dedicated student team supported by Celia Polop - Miriam Moreno Sierra, Josune Sarasa Iroz, Emma Fierro López, María Cristina López Arenas, Lucía Mejía, Hugo Sarasa, Teresa García Lorenzo, and Mario Ruiz Cano - the initiative invited visitors to discover how energy transforms and powers our planet.

The activity offered participants a comprehensive exploration of energy systems, from renewable energy sources and their real-world implementation challenges to the chemistry behind batteries. Young attendees engaged in hands-on workshops where they constructed cars and windmills from recycled materials, directly experiencing energy transformation in action.

European Researchers Night 2025.



Science and Innovation Week 2025

During the 25th Week of Science and Innovation of Madrid Fundación para el Conocimiento madri+d, IFIMAC presented three scientific activities for the general public. The interactive workshop-talk "Vaya hueso, the scientist and their method with Profesor10," directed by scientific communicator Profesor10demates, guided attendees through the exploration of the contributions of Newton, Archimedes, and Einstein. Practical demonstrations of various scientific concepts engaged the audience in hands-on learning.

Juan Carlos Cuevas delivered the talk "Many-body quantum mechanics: More is better," commemorating the centenary of quantum mechanics. He explained in an engaging and accessible way how condensed matter physics emerged from quantum mechanics and explored its fascinating applications in contemporary science.

Ferry Prins, together with Emma López Ortín, Lucía Mejía Sáez, Hugo Sarasa, Raquel Utrera Melero, Antonella Cutrupi, Juan Rodríguez Lorente, Iolanda Di Bernardo, and Elena Tamayo, presented the EnCambio project, funded by FECYT (www.encambio.org).

XXV Semana de la Ciencia y la Innovación de Madrid



Participants engaged with educational videos about climate change and hands-on activities exploring energy transformation and renewable energy generation. An interactive game helped attendees understand carbon footprints and how chemical batteries work.



Exploring Condensed Matter Physics from Príncipe de Asturias School: Science Workshops with IFIMAC

In November 2025, researchers from IFIMAC conducted the second edition of the project titled "Exploring Condensed Matter Physics from Príncipe de Asturias School: Science Workshops with IFIMAC". Led by Diego Martín Cano, the project delivered six hands-on workshops designed to introduce students to fundamental scientific concepts: The Scientific Method, a Great Ally!; What is Matter Made Of?; Laws of Motion; Where Does Colour Come From?; Science Gives You Wings; and It's Not Magic, It's Pressure!

Supported by a Cultural Transfer Grant from UAM, this initiative strengthens IFIMAC's scientific outreach efforts and deepens its engagement with the primary education community. In its second edition, students in grades 4–6 explored physics through practical activities, fostering scientific curiosity and cultivating critical thinking and observational skills.



Link to video: <https://youtu.be/oo2IH0LTJXE>



Project: "En Cambio: Educación Transversal acerca del Cambio Climático"

The EnCambio project, funded by Fecyt (FCT-24-21047), is developing interdisciplinary educational resources to integrate climate change content across primary school levels to complement subjects, such as Natural Sciences, Geography, Language, and Values Education.

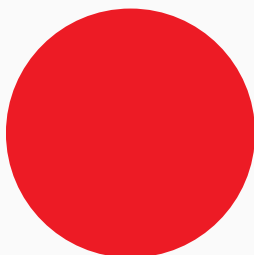
Led by Ferry Prins, the team is producing educational videos (in Spanish) in collaboration with CEIP Príncipe de Asturias, in which climate change evidence is discussed. In 2025, two videos were launched:

Which is the warmest planet in the solar system? In this video, Laura Rojo explores Venus's extreme atmosphere and explains how the greenhouse effect drives climate change on Earth.
<https://youtu.be/LMn83wJsGC8>



Meet Eunice Foote, pioneer of change: In this video, Laura Rojo explains how Eunice Foote's groundbreaking work on how carbon dioxide traps heat was largely overlooked for over a century because she was a woman. Her research laid the foundation for our modern understanding of the greenhouse effect and climate change.
<https://youtu.be/d2Yr6gQWkYU>

This project runs from July 2025 to June 2026.



IFIMAC ON MEDIA



IFIMAC Newsletter

The IFIMAC Newsletter, established by the Communications Committee in 2023, functions as a principal dissemination channel for institutional activities and periodic reporting of research accomplishments to our scientific personnel. This communications strategy facilitates interdisciplinary collaboration and organizational cohesion within the Centre. The digital newsletter is distributed via email to our researchers.

IFIMAC YOUTUBE CHANNEL



IFIMAC Colloquium

IFIMAC invites colloquium speakers to participate in interviews. In 2025, seven interviews were conducted by IFIMAC PhD students Jaime Echave Sustaeta, Pablo Diez Silva, Paula Obladen and Upasana Das.

These conversations offer students direct access to leading researchers, providing insights into cutting-edge research and career paths. We share the interviews on the IFIMAC YouTube channel, making them available to students, early-career researchers, and anyone interested in condensed matter physics. Through this initiative, we foster dialogue, mentorship, and knowledge exchange within and beyond our scientific community.

Interviews:

Interview with Jordi García-Ojalvo: <https://youtu.be/abb80ZZ-9fo>

Interview with William D. Oliver: <https://youtu.be/lrNJFXF2vxk>

Interview with Raffaele Mezzenga: <https://youtu.be/fsy9QY3GaHE>

Interview with Päivi Tórmä: <https://youtu.be/e7f57d1Fu3Y>

Interview with Jérôme Faist: <https://youtu.be/nLYsl69-8Jc>

Interview with Jaroslav Favian: <https://youtu.be/2eGpCyHCXdk>

Interview with Vidya Madhava: <https://youtu.be/NVvEel34lwI>

We also create YouTube Shorts that highlight the key moments from these interviews. Visit our channel to find out more!



IFIMAC-UAM Climate Colloquium

This initiative, organized by Ferry Prins and Daniel Farías members of IFIMAC as a spin-off of their transversal course on climate change, aims to bring global experts on climate change to the UAM community.

Jorge Olcina, professor at Universidad de Alicante gave a colloquium entitled: “Cambio climático en España: evidencias, adaptación y comunicación”. Professor Olcina addressed the critical need for effective climate change communication in Spain and beyond. The speaker emphasized that climate change is no longer a distant concern.

Colloquium: <https://youtu.be/f7sRfOHK-Yw>

Professor Stefan Rahmstorf, oceanographer and climatologist, presented a colloquium on the risks associated with the destabilization of the Atlantic Meridional Overturning Circulation (AMOC) and its potential consequences for the global climate.

Colloquium: <https://youtu.be/IPc4Blqlx7I>

Interview: <https://youtu.be/8oCV2ZV3YnQ>



2025 – A Century on Quantum Science and Technology

As part of the International Year of Quantum Science and Technology, IFIMAC organized a series of talks celebrating a century of quantum mechanics and its profound impact on science and technology.

The sessions explored quantum theory from multiple angles: its interpretation in condensed matter physics through Quantum Bayesianism, its role in developing next-generation technologies, the use of quantum light for information security, and the counterintuitive phenomena that emerge in many-body quantum systems. Together, all five talks illustrated how quantum principles continue to reshape computing, materials science, and emerging technologies in the 21st century.

i-φ MAC 1/YQ2025

IFIMAC CELEBRA EL CENTENARIO DE LA MECÁNICA CUÁNTICA

Pedro Tarazona Bayesianismo Cuántico (Qbism): Interpretación natural de la Mecánica Cuántica desde la Física de la Materia Condensada	Iván Brihuela Cuántica: Cuando la Física Cuántica se une a la Tecnología Cuántica.
Elena del Valle & Carlos Antón Hackers vs Fotones mensajeros: Cómo la luz cuántica protege la información – introducción a la criptografía cuántica.	Juan Carlos Cuevas Mecánica cuántica de muchos cuerpos: Más es mejor
Eduardo Lee Iga Cuando la electrónica se vuelve cuántica: El camino hacia un computador cuántico a partir de superconductores y semiconductores	

The talks are available:



Pedro Tarazona: <https://youtu.be/AcXfBAi3HWk>

Iván Brihuega: <https://youtu.be/6-F8FgvKtBE>

Elena del Valle y Carlos Antón: <https://youtu.be/CCFnhHKFjvY>

Juan Carlos Cuevas: <https://youtu.be/BWqmhsy6bcM>

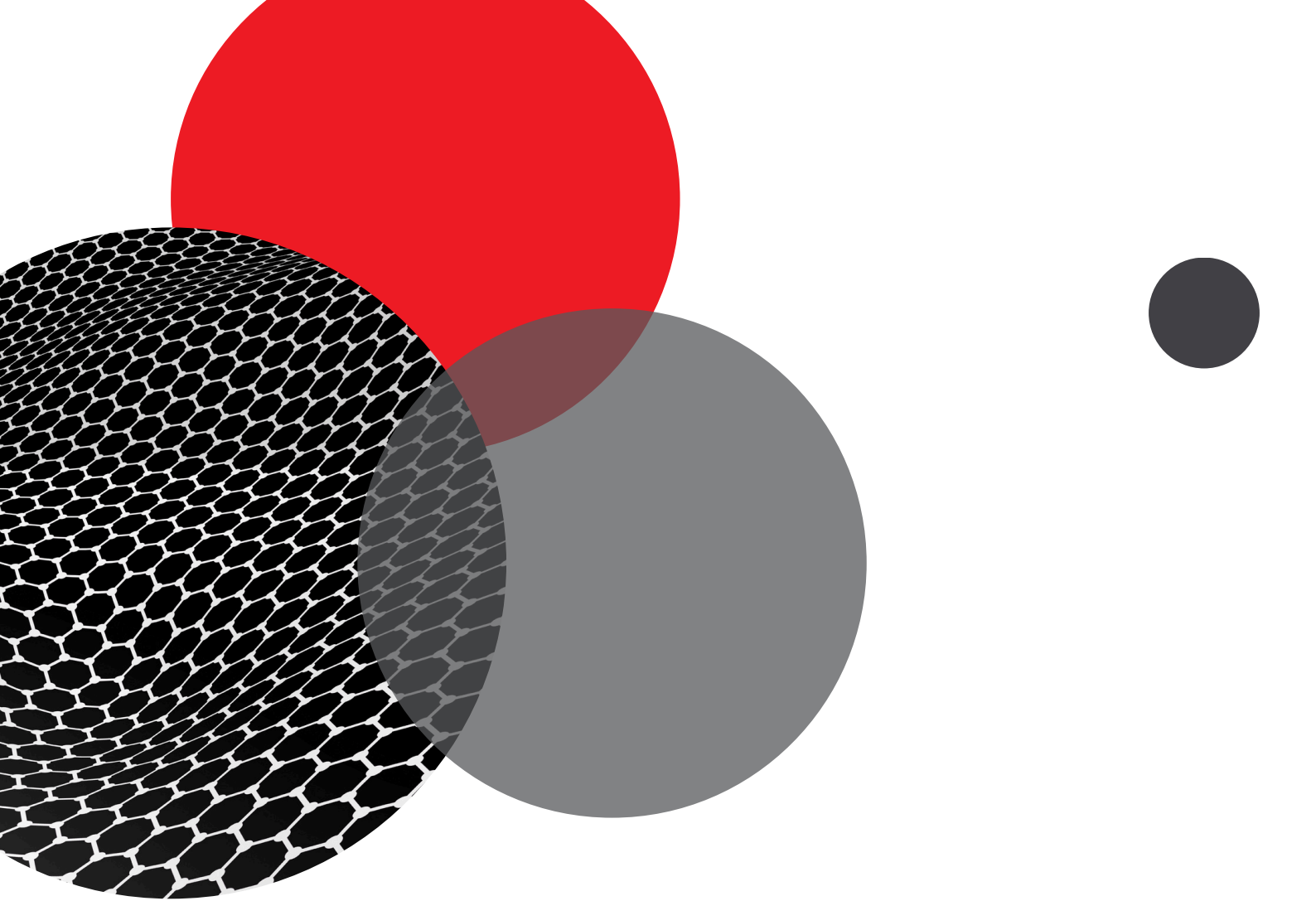
Eduardo Lee: <https://youtu.be/ysKfQzyjt7k>



IFIMAC SOCIAL MEDIA

In 2025, we expanded our #CondensedMatterPioneers initiative across social media, launching a new Instagram account to reach a broader audience.





7

HUMAN RESOURCES

NEW MEMBERS PROPOSED BY IFIMAC RESEARCHERS



Miguel Bello

Miguel Bello is a theoretical physicist working at the interface of quantum optics and condensed matter physics. He did his PhD at the Materials Science Institute of Madrid, under the supervision of Prof. Gloria Platero. In January 2020, he defended his thesis at the UAM. After that, he joined the Theory Division of the Max-Planck Institute of Quantum Optics in Garching (Germany) as a postdoctoral researcher, working under the supervision of Prof. Ignacio Cirac. In November 2024, he won the IFIMAC Young Leader position, funded by the Maria de Maeztu excellence program, and the next year, the Talento “César Nombrela” grant, funded by the Community of Madrid. His main lines of research include topological quantum optics, quantum many-body dynamics and collective phenomena in open quantum systems.



Erving Ximendes

Erving Ximendes's research focuses on luminescent nanomaterials and optical sensing for advanced thermometry and multiparametric imaging, with particular emphasis on near-infrared luminescence, nanothermometry, and data-driven analysis for biomedical and harsh-environment applications. He obtained his PhD in Physics (UFAL, Brazil) working on optical spectroscopy, and subsequently carried out postdoctoral research in Europe, developing expertise at the interface of photonics, nanomaterials, and bio-optics. After joining UAM, he has established an independent research line centered on luminescence-based sensing, hyperspectral and time-resolved imaging, and the integration of machine learning techniques to overcome cross-sensitivities in optical measurements. His work combines materials synthesis and characterization with advanced optical instrumentation and data analysis, targeting applications ranging from biomedicine to functional materials. In 2023, he was awarded a Ramón y Cajal Fellowship, and he currently carries out his research at UAM within the Department of Física de Materiales, actively engaging in interdisciplinary collaborations.



**Francisco Javier del Pino
Gutierrez**

Javier del Pino's research examines collective behavior far from equilibrium in quantum-engineered platforms relevant to condensed matter physics, including photonic and mechanical systems. He earned his PhD at Universidad Autónoma de Madrid in 2018 on cavity quantum electrodynamics with organic molecules and their hybrid light-matter excitations, receiving the Extraordinary PhD Thesis Prize. He then joined AMOLF (Amsterdam) as a postdoctoral researcher, as the sole theorist in an experimental group, developing schemes to engineer artificial magnetic fields that enable one-way sound propagation in opto-mechanical systems. With an ETH Postdoctoral Fellowship at the Institute for Theoretical Physics, ETH (Zurich) he expanded this work to topological effects in driven-dissipative nonlinear systems and quantum simulation. From 2023 to 2025 he was Interim Professor (W2) at the University of Konstanz. In 2025, he returned to Madrid as a Ramón y Cajal Researcher at IFIMAC, Universidad Autónoma de Madrid. His current work builds theory on driven-dissipative quantum matter, using topology, nonequilibrium dynamics, and nonlinearity to guide the design of emerging photonic, mechanical, and hybrid quantum platforms.



Iolanda Di Bernardo

Iolanda Di Bernardo is a Ramon y Cajal fellow at Universidad Autónoma de Madrid, where she leads efforts in the synthesis and exploration of strongly-correlated two dimensional materials. Her research combines atomically resolved microscopy with advanced spectroscopic techniques to discover quantum phenomena that emerge at the nanometric scale. She obtained her Ph.D. from Sapienza, Università di Roma, then worked at several prestigious research centres in Australia - Queensland University of Technology, Australian National University, Monash University - before moving to Madrid. Over the years, she was awarded several prestigious individual fellowships, like the postdoctoral Women in FLEET fellowship (in Melbourne), the MarieCurie Postdoctoral Fellowship, the Juan de la Cierva fellowship and the Ramón y Cajal fellowship.



Edouardos Loukopoulos

Edouardos Loukopoulos obtained his PhD in Chemistry in 2018 (University of Sussex, United Kingdom). His main research interest is the design, synthesis and modification of novel metal-organic compounds to develop advanced functional materials through structure-property correlations. In 2020 he joined University of Crete (Greece) as a postdoctoral researcher to work on metal-organic frameworks (MOFs) for advanced sorption/separation applications. In 2022 he joined Universidad Autónoma de Madrid (Spain) as a postdoctoral researcher, developing MOFs for water remediation. In 2023, he was awarded an MSCA fellowship to continue his research in UAM. In 2025, he joined IFIMAC-UAM as a Junior Group Leader to initiate his independent research profile, developing functional porous materials for sustainability. His expertise includes synthetic inorganic and materials chemistry, combining an extensive crystallographic background and advanced synchrotron characterization techniques.



Sanchar Sharma

Sanchar Sharma's theoretical research centers on the intersection of magnetism and quantum information. After completing graduate studies in Electrical Engineering at the Indian Institute of Technology Bombay (IIT-B), they switched to physics upon joining TU Delft for a PhD, focusing on the interaction of magnons and photons. In 2019, they moved to the Max Planck Institute (MPI) in Erlangen, Germany as a postdoctoral researcher, where they began developing the then-nascent field of quantum magnonics. This work continued after relocating to RWTH Aachen, Germany in 2023. The following year, they joined the École Normale Supérieure (ENS) in Paris, investigating topological quantum solitons in magnets.

In 2025, they joined IFIMAC as a "la Caixa" Junior Leader, where they currently develop theoretical frameworks for quantum transport of magnons in ferromagnetic insulators.

IFIMAC RESEARCHERS

SURNAME AND NAME	PROFESSIONAL CATEGORY	DEPARTMENT	RESEARCH LINE/S
Aliev Kazanski, Farkhad	Catedrático de Universidad	FMC	AM
Alvarez Alonso, Jesús	Titular de Universidad	FMC	NP AM
Álvarez Carrera, José Vicente	Titular de Universidad	FMC	FPSM, NP, SCMB
Antón Solanas, Carlos	Investigador CM-Talento	FM	AM, NQO
Aragonés Gómez, Juan Luis	Investigador RyC	FTMC	SCMB
Ares García, Pablo	Investigador RyC	FMC	AM, NP
Arroyo Huidobro, Paloma	Investigadora RyC	FTMC	NQO
Assenza, Salvatore	Investigador RyC	FTMC	SCMB
Bausá López, Luisa E.	Catedrática de Universidad	FM	AM, NQO
Bello Campello, Miguel	IFIMAC Young Leader	FTMC	NQO
Bravo Abad, Jorge	Titular de Universidad	FTMC	NQO
Brihuega Alvarez, Iván	Titular de Universidad	FMC	AM, NP
Burset Atienza, Pablo	Investigador CM-Talento	FTMC	NP, AM
Burzurí Linares, Enrique	Investigador RyC	FMC	NP, AM
Camarero de Diego, Julio	Titular de Universidad	FMC	NP, AM
Cinacchi, Giorgio	Contratado Doctor	FTMC	SCMB, AM
Clayton Ximendes, Erving	Investigador RyC	FM	NQO
Cuevas Rodríguez, Juan Carlos	Titular de Universidad	FTMC	NP, NQO
de Pablo Gómez, Pedro José	Titular de Universidad	FMC	SCMB, NP
Delgado Buscalioni, Rafael	Titular de Universidad	FTMC	SCMB
Di Bernardo, Iolanda	Investigadora RyC	FMC	SCMB
Díaz-Tendero Victoria, Sergio	Titular de Universidad	Q	FPSM
Farias Tejerina, Daniel	Catedrático de Universidad	FMC	NP
Feist, Johannes	Contratado Doctor	FTMC	NQO
Fernández Domínguez, Antonio Isaac	Titular de Universidad	FTMC	NQO
Flores Sintas, Fernando	Profesor Emérito	FTMC	NP, FPSM
García González, Pablo	Titular de Universidad	FTMC	FPSM,NQO

SURNAME AND NAME	PROFESSIONAL CATEGORY	DEPARTMENT	RESEARCH LINE/S
García Michel, Enrique	Catedrático de Universidad	FMC	AM, NP
García Mochales, Pedro	Contratado Doctor	FMC	FPSM
García Vidal, Francisco José	Catedrático de Universidad	FTMC	NQO
Gómez Herrero, Julio	Catedrático de Universidad	FMC	NP, AM
Gómez Santos, Guillermo	Titular de Universidad	FMC	FPSM
Gómez-Navarro González, Cristina	Titular de Universidad	FMC	AM, NP
González Herrero, Héctor	Investigador RyC	FMC	AM, NP
Guantes Navacerrada, Raúl	Titular de Universidad	FMC	SCMB
Guillamón Gómez, Isabel	Titular de Universidad	FMC	AM
Hernando Pérez, Mercedes	Investigadora RyC	FM	SCMB
Lazic, Snezana	Contratado Doctor	FM	NP
Lee, Eduardo Jian Hua	Contratado Doctor	FMC	NP, AM
Levy Yeyati, Alfredo	Catedrático de Universidad	FTMC	NP, AM
López Vázquez de Parga, Amadeo	Catedrático de Universidad	FMC	NP
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Loukopoulos Edouardos	IFIMAC Young Leader	QI	AM
Marchetti, Francesca Maria	Titular de Universidad	FTMC	NQO
Marqués Ponce, Manuel	Titular de Universidad	FM	NQO
Martín Cano, Diego	Investigador RyC	FTMC	NQO
Martín Fernández, María Dolores	Titular de Universidad	FM	NQO
Martínez Galera, Antonio J.	Titular de Universidad	FM	AM, NP
Merino Troncoso, Jaime	Titular de Universidad	FTMC	AM
Miguel Llorente, Juan José	Titular de Universidad	FMC	AM, NP
Míguez Gómez, David	Contratado Doctor	FMC	SCMB
Monreal Vélez, Rosa	Profesora Emérita	FTMC	NP, NQO
Moreno Soriano, Esteban	Titular de Universidad	FTMC	NQO
Mori Sánchez, Paula	Contratado Doctor	Q	FPSM
Ortega Mateo, José	Catedrático de Universidad	FTMC	AM, SCMB, NP, FPSM

SURNAME AND NAME	PROFESSIONAL CATEGORY	DEPARTMENT	RESEARCH LINE/S
Otero Martín, Roberto	Titular de Universidad	FTMC	AM, NP
Palacios Burgos, Juan José	Catedrático de Universidad	FMC	NP, FPSM
Palacios Cañas, Alicia	Titular de Universidad	Q	FPSM
Pérez Pérez, Rubén	Catedrático de Universidad	FTMC	NP, FPSM, SCMB
Platero Prats, Ana Eva	Investigadora RyC	QI	AM
Polop Jordá, Celia	Titular de Universidad	FMC	AM, NP
Porto Ortega, Juan Antonio	Contratado Doctor	FTMC	NQO
Pou Bell, Pablo	Titular de Universidad	FTMC	FPSM, NP
Prins, Ferry	Profesor Permanente Laboral	FMC	NQO
Ramírez Herrero, Mariola	Contratado Doctor	FM	AM, NQO
Ramos Ruiz, Miguel Ángel	Catedrático de Universidad	FMC	AM, SCMB
Rodrigo Rodríguez, José	Titular de Universidad	FMC	AM
Rodríguez Arriaga, Laura	Profesora Permanente Laboral	FTMC	SCMB
Rubio Bollinger, Gabino	Catedrático de Universidad	FMC	NP, AM
Sánchez Rodrigo, Rafael	Contratado Doctor	FTMC	NP
Segovia Cabrero, Pilar	Titular de Universidad	FMC	AM, NP
Seijo Loché, Luis	Catedrático de Universidad	Q	FPSM
Sharma, Sanchar	La Caixa Junior Leader	FTMC	NP
Soler Torroja, Jose María	Profesor Emérito	FMC	FPSM
Suderow Rodríguez, Hermann	Titular de Universidad	FMC	AM, NP
Tarazona Lafarga, Pedro	Profesor Emérito	FTMC	SCMB
Tejedor de Paz, Carlos	Profesor Emérito	FTMC	NQO
Valle Reboul, Elena del	Contratado Doctor	FTMC	NQO, NP
Van Der Meulen, Herko	Titular de Universidad	FM	AM, NQO
Velasco Caravaca, Enrique	Titular de Universidad	FTMC	SCMB
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Vieira Díaz, Sebastián	Profesor Emérito	FMC	NQO
Viña Liste, Luis	Catedrático de Universidad	FM	FPSM

SURNAME AND NAME	PROFESSIONAL CATEGORY	DEPARTMENT	RESEARCH LINE/S
Yndurain Muñoz, Félix	Profesor Emérito	FMC	FPSM
Zamora Abanades, Félix	Catedrático de Universidad	QI	AM
Zotti, Linda Ángela	Profesora Permanente Laboral	FTMC	NP, FPSM, SCMB

ACRONYMS

Departments

FMC: Física de la Materia Condensada
 FTMC: Física Teórica de la Materia Condensada
 FM: Física de Materiales
 QI: Química Inorgánica
 Q: Química

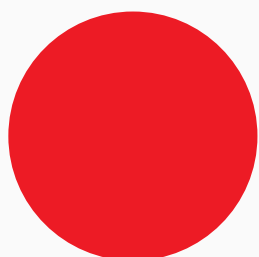
Research Lines

NP: Nanophysics
 AM: Advanced Materials
 SCMB: Soft Condensed Matter and Biophysics
 FPSM: First-principles Simulations and Modeling
 NQO: Nano and Quantum Optics



IFIMAC STAFF

SURNAME AND NAME	PROFESSIONAL CATEGORY
Bilan, Stefan	IT and High-Performance Computing Infrastructure
Escobero Alonso, David	IT and High-Performance Computing Infrastructure
Marques Gallego, Patricia	Outreach
Sánchez Gil, Susana	Project Manager
Shahnazarova, Gubakhanim	Nanofabrication Technician
Souto Pérez, Beatriz	Project Manager Assistant





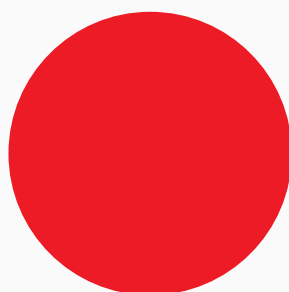
8

BUDGET

BUDGET



GASTOS			INGRESOS	
Previsión de gastos de personal, gastos corrientes de funcionamiento y equipamiento e inversiones.	Gastos de personal	147,457.85 €	Estimación de ingresos por actividad propia	586,662.03 €
	Gastos corrientes de funcionamiento	123,469.89 €		
	Equipamientos e inversiones	64,317.27 €		
TOTAL GASTOS		335,245.01 €	TOTAL INGRESOS	586,662.03 €





EXCELENCIA
MARÍA
DE MAEZTU



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