

Promoting gender equality and diversity in physics from IFIC

Mariam Tórtola
IFIC, CSIC/Universitat de València

ICHEP 2020 | PRAGUE

40th International Conference on High Energy Physics, July 29th, 2020

Instituto de Física Corpuscular



- ✓ IFIC is a joint centre between the Spanish Research Council (CSIC) and the University of Valencia.
- ✓ Its origin dates back to 1950, being one of the oldest Spanish physics institutes.
- ✓ Awarded with the ‘Severo Ochoa’ accreditation (2015) as Centre of Excellence for its outstanding performance and scientific contributions at national and international level, its impact at industrial and social level, and its ability to attract scientific talent.
- ✓ IFIC is an international reference centre in Particle, Astroparticle and Nuclear Physics, both in the theory and experimental domains.
- ✓ IFIC’s personnel in 2018: 280, scientific personnel: 211, **51 women in scientific personnel (24%)**. From 2019: 2 female directors (Prof. N. Rius and B. Rubio)

Office for Young Researchers, Gender & Diversity (JIGD)



Created in October 2017

Founders & Coordinators (until Dec2019)



Arantza Oyanguren



Juande Zornoza

Current Coordinators



Enrique Nácher



Mariam Tórtola

Goals of the JIGD office

The **main objective** of the **JIGD office**, coordinated by two researchers from IFIC, with a two-year mandate, is to try to eliminate any kind of discrimination or harassment that may take place at the Institute, ensuring equal opportunities for all its members. and promoting good relations between the components of all its departments.



Tasks of the JIGD office

- ☑ Advise IFIC's Board on issues related to Early-Career, Gender and Diversity.
- ☑ Help and advise, in a strictly confidential way, anyone who feels victim of harassment, discrimination or any other type of inappropriate behavior.
- ☑ Ensure equal opportunities, regardless of gender, sexual orientation, age, race, or religion.
- ☑ Perform statistics on a regular basis, as well as gather any relevant information related to JIGD, to identify possible biases.
- ☑ Organize meetings and events promoting discussion forums about JIGD.
- ☑ Report annually on incidents and activities related to this office.
- ☑ Hold regular meetings with other national and international entities to discuss the activities carried out

Website JIGD Office @ IFIC

The screenshot displays the IFIC website interface. At the top left is the IFIC logo (INSTITUT DE FÍSICA CORPUSCULAR). To the right are the logos for CSIC (CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS) and UNIVERSITAT DE VALÈNCIA. A horizontal navigation bar contains the following items: EL IFIC (circled in red), INVESTIGACIÓN, UCIE, SERVICIOS, DIVULGACIÓN, MÁSTER/DOCTORADO, EMPLEO Y BECAS, and ACCESOS RÁPIDOS. Below the navigation bar is a large banner image of a particle detector. On the left side of the banner, there is a text box titled 'Física Nuclear' with a description: 'Esta línea de investigación... en sus aplicaciones: espectroscopía, incineración de residuos nucleares, reacciones nucleares y tecnologías para la física nuclear'. On the right side, another text box mentions 'en física nuclear y... s, incineración de... el desarrollo de... opea FAIR.' A dropdown menu is open under 'EL IFIC', listing: SOBRE EL IFIC, ESTRUCTURA ORGANIZATIVA, PERSONAL DEL IFIC, INFORMACIÓN PARA EL VISITANTE, MEMORIAS ANUALES, FINANCIACIÓN IFIC, PUBLICACIONES, FACTURA ELECTRÓNICA, OFICINA JIGD (highlighted with a red arrow), and PAQUETE DE BIENVENIDA. Below the banner, there are buttons for 'CALENDARIO DE ACTIVIDADES' and 'NOTICIAS'. On the right side, there is a section titled 'Enlaces' with a list of links: Oficina JIGD, Actividades, Informes, Documentos, Enlaces Externos, and Contacto.

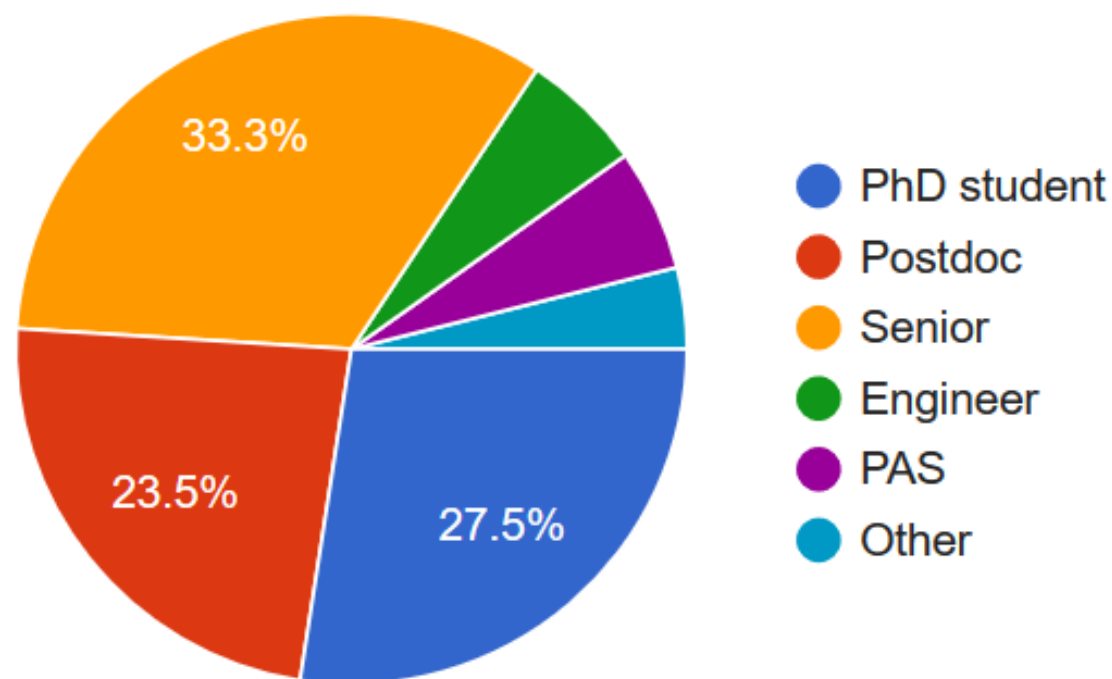
Activities

First JIGD's survey (2017)

51 replies from 250 potential participants

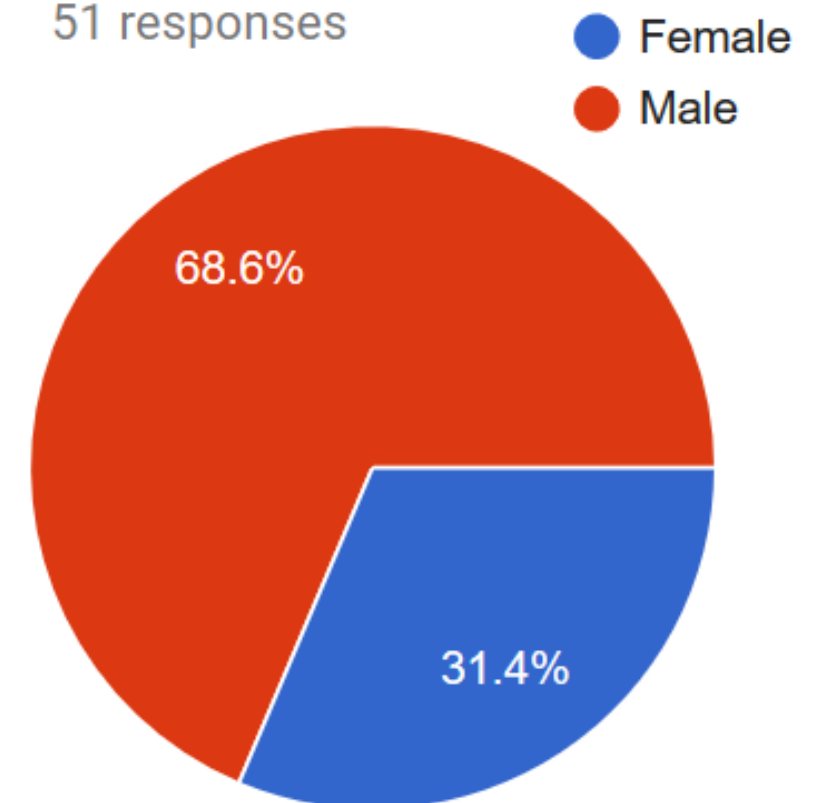
1/6. Position / Puesto

51 responses



2/6. Gender / Género

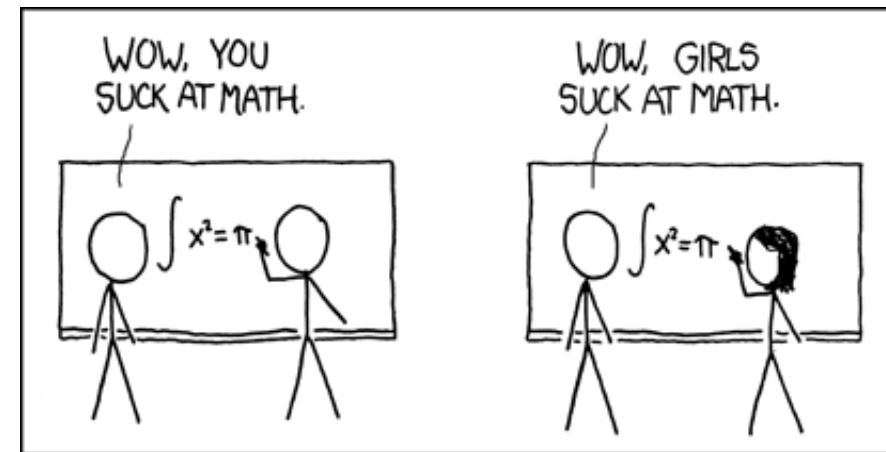
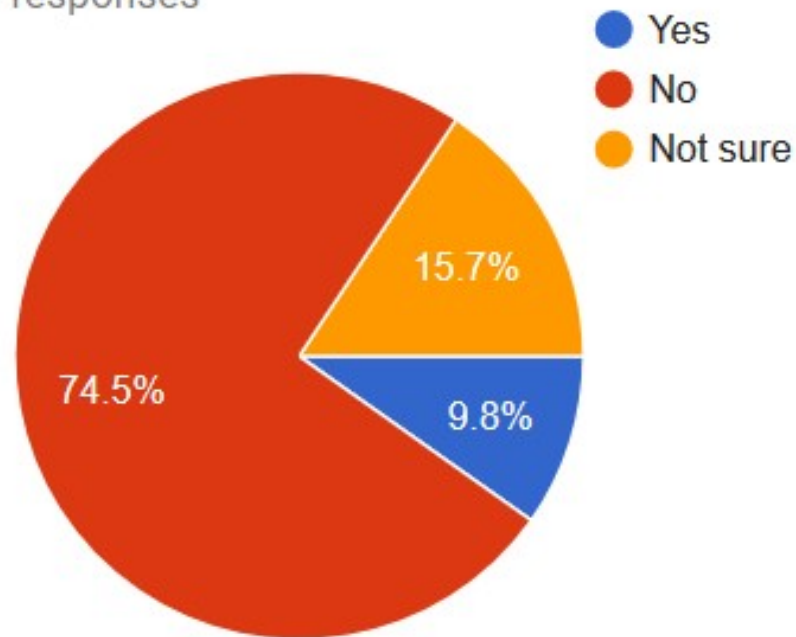
51 responses



Results publicly available [here](#)

3/6. Do you know of any case of discrimination by race, gender, religion, age, sexual orientation or physical/mental condition at IFIC?

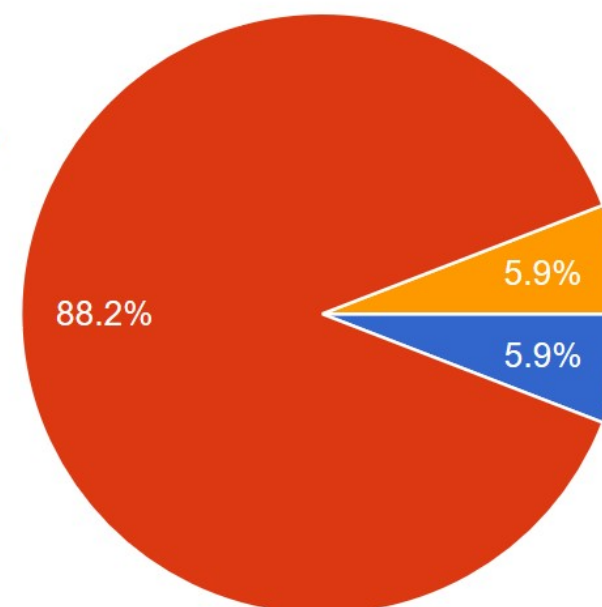
51 responses



4/6. Have you felt yourself any kind of discrimination by race, gender, religion, age, sexual orientation or physical/mental conditions at IFIC? /

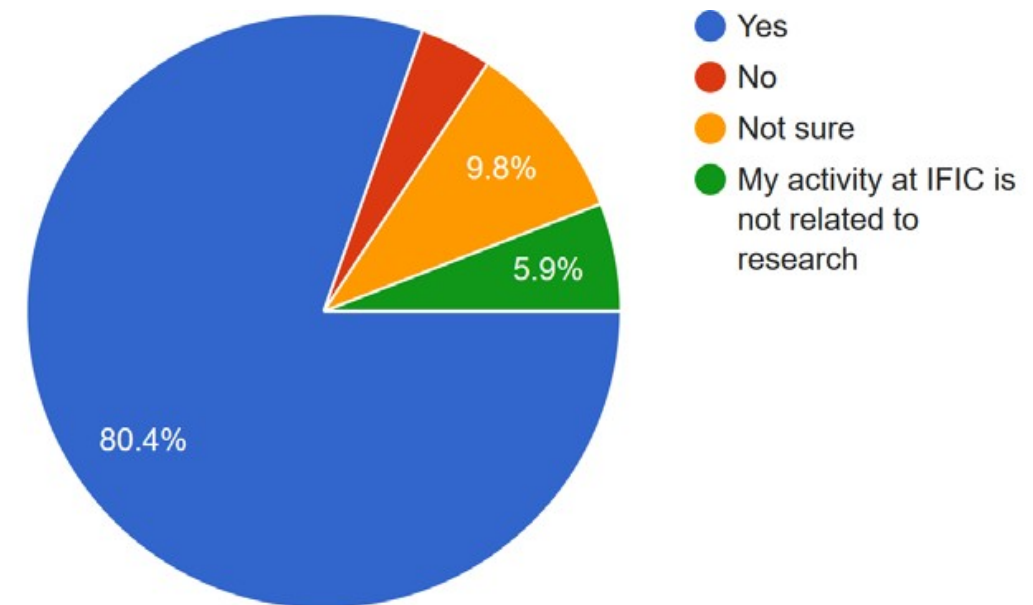
51 responses

● Yes
● No
● Not sure



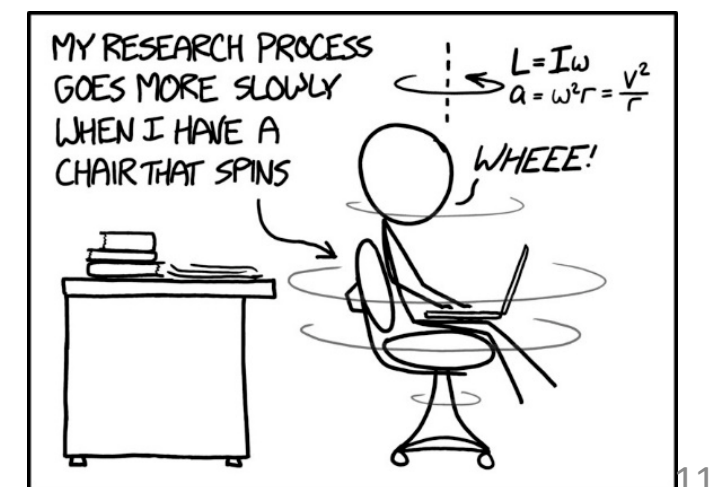
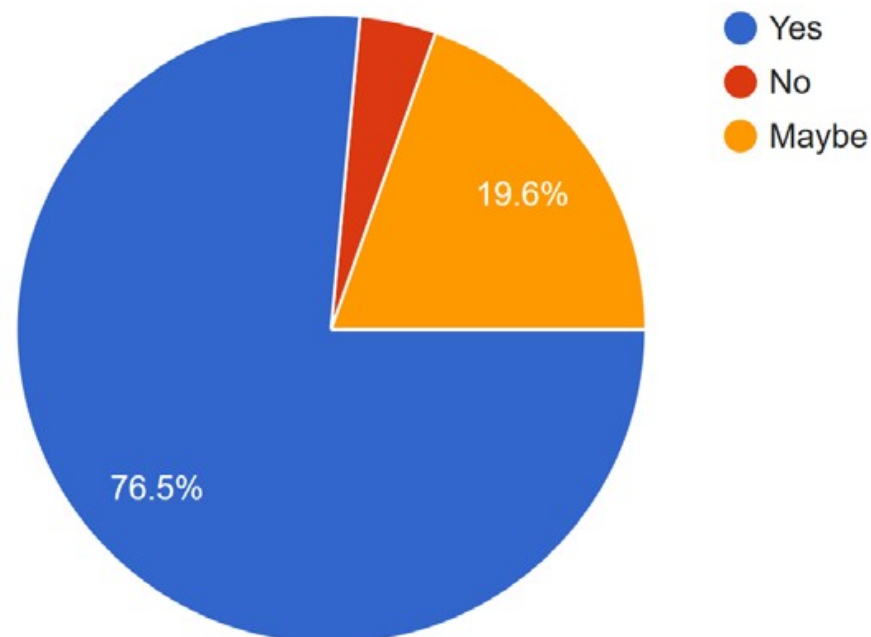
5/6. Would you like to continue in research? / ¿Te gustaría continuar en investigación?

51 responses



6/6. Would you like to continue working at IFIC? / ¿Te gustaría continuar trabajando en el IFIC?

51 responses



Seminar on mental health in Academia

June 11th, 2018

✓ Special event to think and discuss about mental health issues in the research career: stress, anxiety, depression, closely related to job insecurity or assigned gender roles in Academia.



✓ Program of the event:

- *A mental health perspective in Spain: an unknown emerging problem*, by M^a Emilia Rodríguez, psychiatrist.
- *Mental health in academia: a graduate student perspective*, by Andrea J. Welsh, physics graduate assistant at the Georgia Institute of Technology.
- Round table discussion.

Coffee and Cake on Early Career, Gender and Diversity

January 15th, 2019

- ☑ Informal meeting of IFIC young researchers with Professor Barbara Sciascia, from *Laboratori Nazionali di Frascati*.
- ☑ Many topics were discussed: the relevance of a JIGD office, how to fight against sexual harassment at work, and several concerns raised by the early-career researchers.
- ☑ Feedback from the meeting was transferred to IFIC's Board.



Statistics on gender equality

- ✓ Along 2019 we have performed some statistics to visualize the ratio of female to male speakers at conferences and workshops.

Examples:



Plenary: 11M, 3F (21%) - **RENATA:** 11M, 5F (31%) - **REFIS:** 7M, 2F (22%)
LHC: 9M, 7F (44%) - **THEORY:** 16M (0%) - **ORIENTED:** 10M, 4F (29%)
ACCELERATORS: 8M, 1F (11%) - **NUCLEAR:** 6M, 1F (14%)

IFIC Colloquia

2018: 10M, 3F (23%)

2019: 7M, 5F (42%)

IFIC Seminars (all types)

2018: 62M, 16F (21%)

2019: 58M, 17F (23%)

February 11th: International Day of Women and Girls in Science



February 11th: International Day of Women and Girls in Science

11/Feb/2018

10/Feb/2019

12/Feb/2020

11 de Febrero:
Día Internacional de la Mujer
y la Niña en la Ciencia



**FIGURAS
OCULTAS**

El papel de tres mujeres
clave en el desarrollo
espacial de la NASA



CINE

IFIC
INSTITUTO DE FÍSICA
CORPUSCULAR

EXCELENCIA
SEVERO
OCHOA

(EE.UU., 2016)

Domingo

11 de febrero de 2018

Seminario del IFIC

11:00
Almuerzo



11:30
Proyección

13:40 – 14:00
Debate

Entradas: jigd@ific.uv.es

Encuentro: entrada principal del
Parque Científico, Catedrático
José Beltrán 2, Paterna

A Apta para todos
los públicos



11 de Febrero:
Día Internacional de la Mujer
y la Niña en la Ciencia



CONTACTO

Un mensaje del espacio lejano.
¿Quién será el primero en ir?
Un viaje al corazón del universo



CINE

IFIC
INSTITUTO DE FÍSICA
CORPUSCULAR

EXCELENCIA
SEVERO
OCHOA

(EEUU, 1997)

Domingo

10 de febrero de 2019

Seminario del IFIC

11:00
Almuerzo



11:30
Proyección

13:40 – 14:00
Debate

Entradas: jigd@ific.uv.es

Encuentro: entrada principal del
Parque Científico, Catedrático
José Beltrán 2, Paterna

A Apta para todos
los públicos



El enigma *Agustina*

EL DOCUMENTAL

Una idea original de Manuel González y Emilio García

Proyección y Coloquio
12 febrero | 15:30h.
Previa con café a las 15h.

Salón de Actos
Parc Científic
U. València

**Día Internacional
de la Mujer y la Niña
en la Ciencia 2020**

Con la colaboración de la Fundación Española para la Ciencia y la Tecnología - Ministerio de Economía y Competitividad



Organiza:



Colabora: **ICMOL** Instituto de
Ciencia Molecular



February 11th: International Day of Women and Girls in Science

International masterclass girls (CERN)



- ✓ 2 editions (2019 & 2020) ~75 participants, girls 14-16 years old
- ✓ Organized by female PhD students at IFIC
- ✓ Discussion session with junior & senior IFIC female researchers



February 11th: International Day of Women and Girls in Science



A. Oyanguren, Round Table “Towards Equality”, Feb 2019



2019, O. Mena, M. Tórtola



IFIC female researchers participate very actively in Feb 11th cycle of talks at high schools

March 8th: International Women's Day

Organization of joint conferences with IATA (CSIC)

DÍA INTERNACIONAL DE LA MUJER
8 de marzo 2018

**UNA VENTANA
AL
UNIVERSO INVISIBLE**
Pilar Hernández
Catedrática de Física - UV

Miércoles, 14 de marzo 12:00h.
Salón de actos del Edificio de cabecera
Parque Científico UV
C/ Catedrático José Beltrán, 2
Paterna

JICD
EXCELENCIA SEVERO OCHOA
iata
IFIC
CSIC
VNIVERSITAT ID VALÈNCIA

T. Andreu

P. Hernández, 2018

Dra. OLGA MENA
Científica Titular, CSIC

**INVISIBLES EN EL COSMOS...
E INVISIBLES EN LA CIENCIA**

8 de marzo de 2020 **Día internacional de la Mujer**

Salón de Actos del edif. de cabecera Parc Científic UV
C/ Catedrático José Beltrán, nº2 46980 Paterna
9 de marzo, 12:00h

JICD **VNIVERSITAT ID VALÈNCIA** **IFIC** **CSIC** **iata**

Obra de la artista Ana Beltrán Porcar, diseño poster Tandreu

O. Mena, 2020

March 8th: International Women's Day

Organization of joint workshop with ICMOL (U. Valencia)

2018

II Jornada de la Mujer Investigadora



Fecha: 5 Marzo 2018

Lugar: Salón de Actos del Edificio de Cabecera del Parque Científico de la Universitat de València

9:00 **Inauguración**

- Pilar Campins, Vicerrectora de Investigación y Política Científica de la Universitat de València (UV)
- Amparo Mañés, Directora de la Unitat d'Igualtat de la UV
- Eugenio Coronado, Director del ICMol de la UV
- Santiago Noguera, Subdirector del Instituto de Física Corpuscular de la UV (IFIC)
- Juan Antonio Raga, Director del Parque Científico de la UV

10:45 **Pausa/Café**

11:15 **Mujer y Ciencia: Cuestión de Química.** Prof. Ángela Sastre Santos (Instituto de Bioingeniería, Universidad Miguel Hernández).

11:45 **Mujeres y ciencia, la ecuación funciona.** Prof. Marta Macho Stadler (UPV/EHU).

9:15 **Mujeres en física: cómo cambiar los números.** Dra. Mariam Tortola Baixauli, premio de investigación L'Oréal-Unesco 'For Women in Science' (IFIC-UVEG/CSIC).

12:15 **Mesa redonda.** Participantes: ponentes, Pilar Campins (Vicerrectora de Investigación y Política Científica de la Universitat de València), Amparo Mañés, Directora de la Unitat d'Igualtat de la UV, Ruth Manzanera Rubio (ICMol), Santiago Noguera (IFIC), Ángela Pérez (CEO de Instituto de Medicina Genómica, S.L.; Parque Científico). Moderadora: Dra. Arantza Oyanguren Campos, Investigadora (IFIC).

9:45 **Agnotología, Gineagnosia e Histéresis social de género.** Prof. Capitolina Díaz (UVEG).

10:15 **Científicas en conventos, palacios, gremios y estudios de cine.** Prof. Adela Muñoz (Universidad de Sevilla).

14:00 Clausura de la jornada

Financiado por MINECO: "Unidad de Excelencia María de Maeztu-ICMol" (2016-2019: MDM-2015-0538) y "Centro de Excelencia Severo Ochoa-IFIC" (2015-2018: SEV-2014-0398); Generalitat Valenciana y Unitat d'Igualtat Universitat de València



2020

IV JORNADA ICMOL
Institut de Ciència Molecular

MUJER INVESTIGADORA
IFIC
INSTITUT DE FÍSICA CORPUSCULAR

27 marzo 2020. 9:30h. Salón de actos
ICMol

Charla "Research..."
Postponed!
Prof. Eva Cifre y Laritza Machín
Grupo de investigación GeST-UJI

<http://go.uv.es/mujer8m/sjornada>
Inscripciones y más info

Girls4STEM project

<http://www.girls4stem.es/>

The banner features a photograph of three women in a meeting, with one pointing at a document. The background is dark blue with white and pink text. Logos for the Spanish Ministry of Science and Innovation, FECYT, and the University of Valencia are at the top. The bottom contains logos for the University of Valencia's Vicerectorat, Unitat d'Igualtat, ETSE-UV, Generalitat Valenciana, and Cefire.

MINISTERIO DE CIENCIA E INNOVACIÓN
FECYT FUNDACIÓN ESPAÑOLA PARA LA CIENCIA Y LA TECNOLOGÍA

Girls4Stem

TE NECESITAMOS

MUJERES, TALENTO, STEM, DIVULGACIÓN, VOCACIONES

UNIVERSITAT DE VALÈNCIA Vicerectorat d'Igualtat, Diversitat i Sostenibilitat
UNITAT D'IGUALTAT
ETSE-UV Escola Tècnica Superior d'Enginyeria Universitat de València
GENERALITAT VALENCIANA
cefire

Girls4STEM project

- ✓ Girls4STEM is a project aimed at promoting female STEM (Science, Technology, Engineering, Mathematics) role models through the organization of outreach activities.
- ✓ The project has a database of female experts in STEM (several from IFIC) that participate in the **activities**:

Family Talks (2/5)

Professional Talks (4/6)



A. Morales, IFIC
07/03/2020



Girls4STEM project

- ☑ Many activities cancelled / postponed due to COVID-19



Family Talks with IFIC researchers

Professional Talk on Physics & Chemistry

“Cecilia Payne” 07 / May / 2020

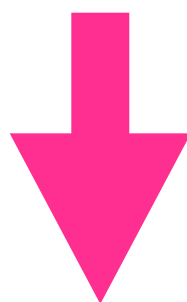
A. Morales & N. Carrasco (IFIC)

I. Abánades & M. González (ICMOL)

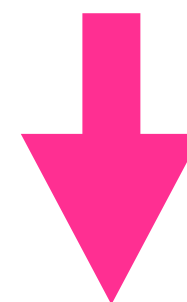
Girls4STEM IFIC Campus

Funded by CSIC

13-17 / July / 2020



Activities will resumed in safe environments as soon as possible



The project will be reformulated into an outreach activity promoting the role of women in physics

Diversity activities

- ☑ JIGD-IFIC Office gave support to the LGBTSTEM Day (July 5th, 2019)



The screenshot shows the 'OUR SUPPORTERS' section of the Pride in STEM website. The navigation bar includes 'Pride in STEM', 'LGBTSTEM DAY', 'Our Organisation', 'News', 'Out Thinkers', 'Events', 'Resources', and 'Other Organisations'. The main heading is 'OUR SUPPORTERS' with a horizontal line below it. Underneath is the sub-heading 'SUPPORTERS 2019'. Three logos are displayed: JIGD (Jóvenes Investigadores, Género y Diversidad) with an IFIC logo, Experimental Psychology (Medical Sciences Division), and ACS (Chemistry for Life®). A large pink arrow points from the left towards the JIGD logo.

Diversity activities

☑ International Day for the elimination of racial discrimination (March 21st)

Postponed!

☑ 2020 LGTB+ Pride Month (June): few activities due to the COVID-19 crisis

Interview with A. Ferreiro (IFIC), COST project

Interview with A. Aparic (IFIC), Scenio TV

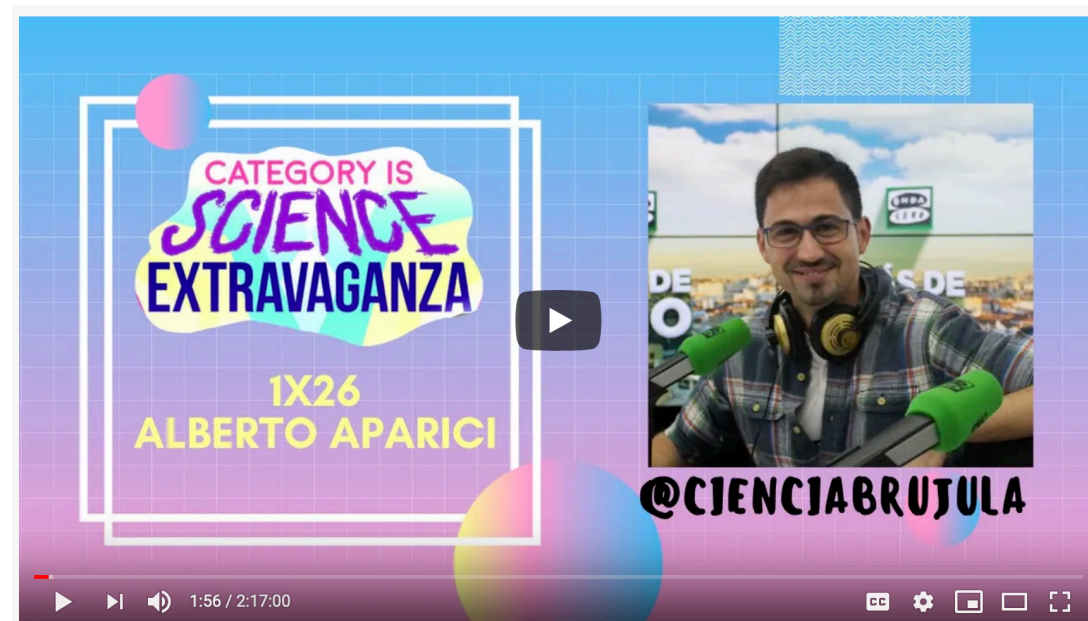


COST CA18108: QG-MM 🇪🇸 @COST_QGMM · 6 de jul.

Interview with CA18108 @COSTprogramme participant Antonio Ferreiro on his research on quantum effects in curved spacetimes and the additional challenges faced by the LGTB+ community in fundamental theoretical physics



Interview with CA18108 Action participant Antonio ...
In the Twilight between General Relativity and
Quantum Theory Antonio Ferreiro on his research ...
qg-mm.unizar.es



☑ 2020 LGTBSTEM Day (Nov 18th 2020): activities in collaboration with spanish and Valencia Physics Faculty associations @PRISMAciencia and @espectrevisible

Plans for the future

From September 2020:

- ☑ Perform a survey on the effect of COVID-19 addressed to all IFIC's personnel.
- ☑ Resume activities postponed during COVID-19 crisis in a safe environment.
- ☑ Create an Equality & Diversity Commission with representatives from all IFIC groups (PhD students, postdocs, ...) to improve the communication channels.

For next years:

- ☑ Continue all of our activities on gender diversity and promotion of female role models in physics: girls masterclass, conferences, outreach talks, ...
- ☑ Increase the number of activities on other diversity aspects that can be relevant for IFIC's personnel and for the physics community.