

# An escape room pilot test about multi-wavelength astronomy, EDI and Open Science

Alba Fernández-Barral (1); Julio Gallardo Jimenéz (2,3);  
**Marcos Villaverde Aparicio (2,3); Sara Cazzoli (2).**

Emilio García Gómez-Caro; Enrique Pérez Montero; Ixaka Labadie García; Pablo Martín Fernández;  
Sol Natalia Molina ; Susana Sánchez Expósito ; Teresa Toscano Domingo.

- (1) Cherenkov Telescope Array Observatory (CTAO)
- (2) Instituto de Astrofísica de Andalucía – CSIC (IAA-CSIC)
- (3) SKA-Spain Team

# How it started



Imagen de jcomp en Freepik

# How it started

RESEARCH

Imagen de jcomp en Freepik



# How it started

RESEARCH

COMMUNICATION

Imagen de jcomp en Freepik

# How it started

RESEARCH

COMMUNICATION

YOUTH ACTIVITIES

Imagen de jcomp en Freepik

How it started

# ESCAPE ROOM !!

RESEARCH

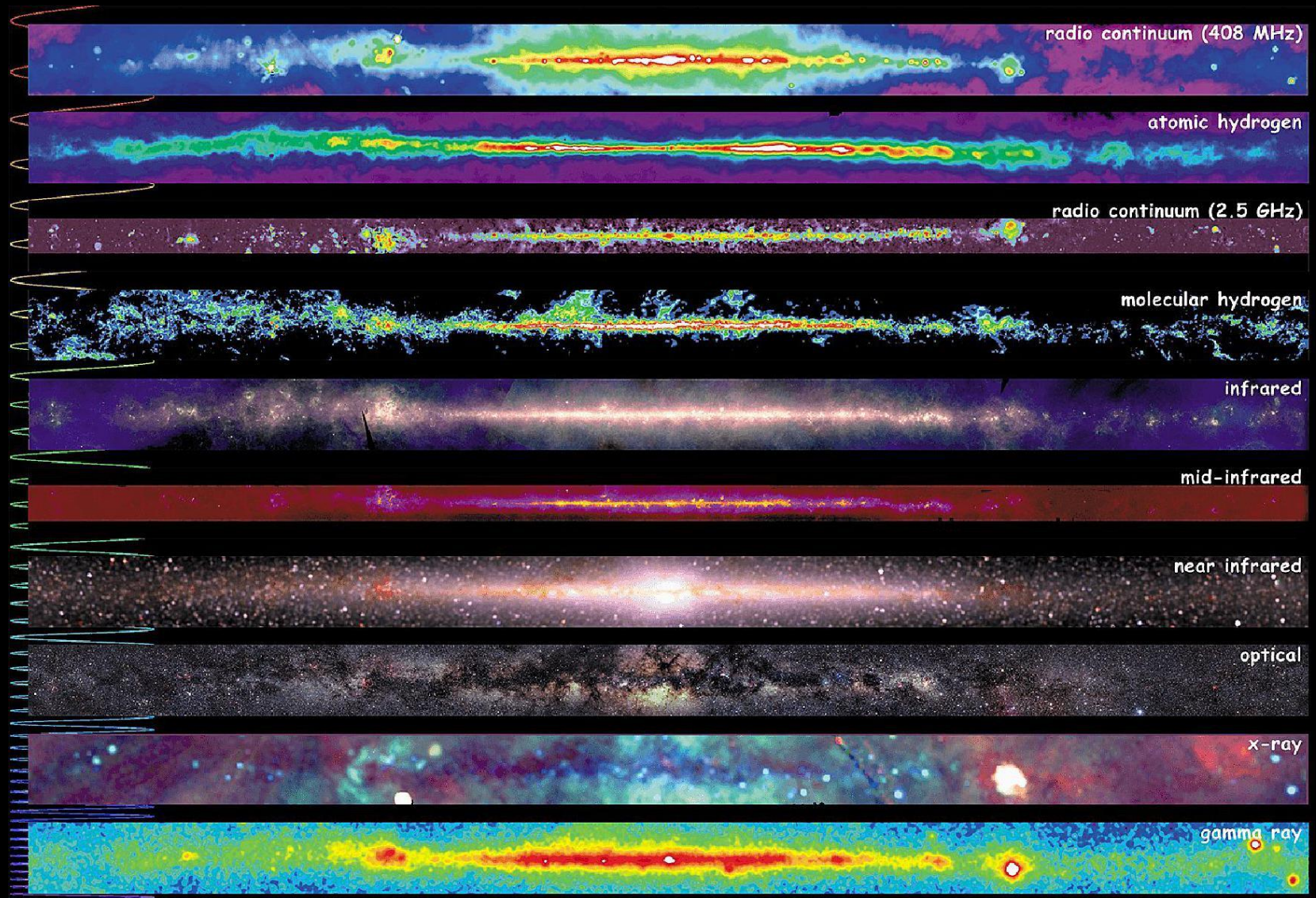
COMMUNICATION

YOUTH ACTIVITIES

Imagen de jcomp en Freepik

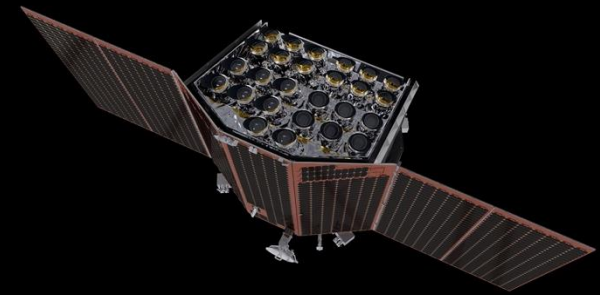


# Multiwavelength astronomy





# Multiwavelength astronomy



OBSERVATORIO  
ASTRONÓMICO  
DE CALAR ALTO





# ESPACIO\_3

Science, Theater, Improv...And more things

Un proyecto coordinado por Sara Cazzoli

UNIVERSIDAD DE GRANADA LA MADRAZA CENTRO DE CULTURA CONTEMPORÁNEA

LIBERTAD

Abierto por defecto, y ven a contar tus movidas.

15.03.2024

Colaboran: Larisa Ramos, Javier Palao, Xavier Barcelo

los públicos para todos

Entrada libre hasta completar aforo

# ESPACIO\_3

IAA CSIC

# ESPACIO\_3

CIENCIA

## El conocimiento nos hará libres... ¿verdad?

Con Susana Sánchez Expósito



LIBERTAD

15 DE MARZO

Palacio del Almirante, Albaicín

IAA CSIC

# ESPACIO\_3

Teatro | Ciencia | Impro

## ESCAPE ROOM

Escape hacia las estrellas

15 DE MARZO

LIBERTAD

Palacio del Almirante, Albaicín  
19:30h  
2 PASES DE 30 PERSONAS

AFORO:  
PRIMERAS 60 PERSONAS

IAA CSIC

# ESPACIO\_3

Teatro | Ciencia | Impro

## MICRO ABIERTO DE CIENCIA

15 DE MARZO

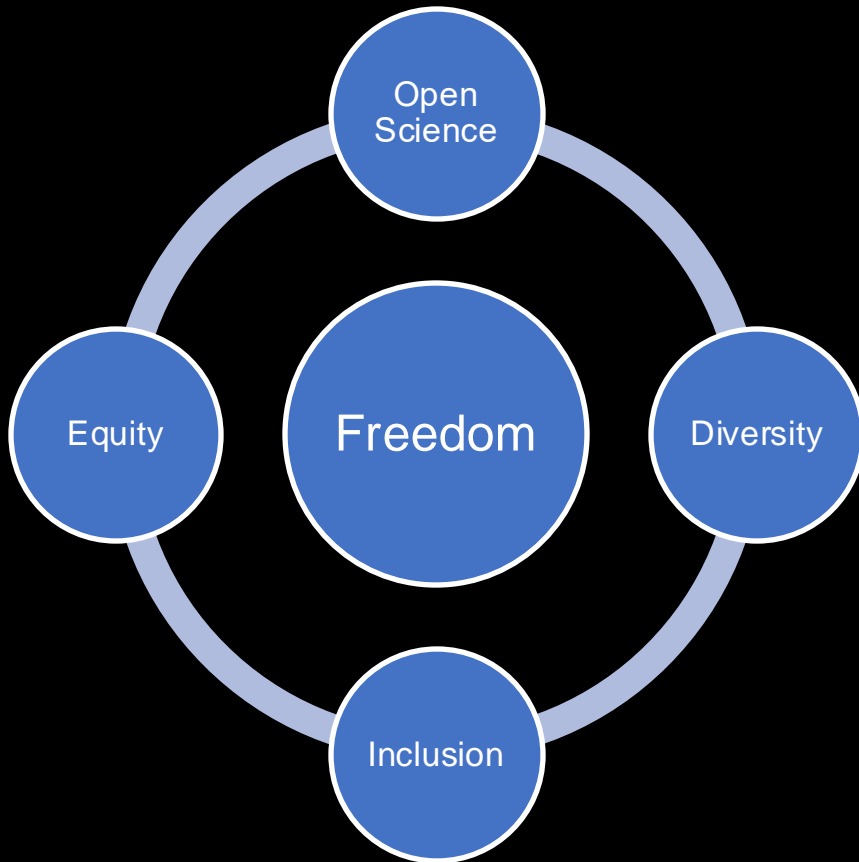
LIBERTAD



Sala Aliatar  
21:00h

IAA CSIC

# ESPACIO\_3



## Open Science (Main topic)

- Talk
- Second main topic

## Equity

- Characters:  
2 women, 1 man, 1 non-binary

## Diversity

- International Project
- 1 Foreigner character

## Inclusion

- 1 visual disabled character
- Some adapted games



# Planning



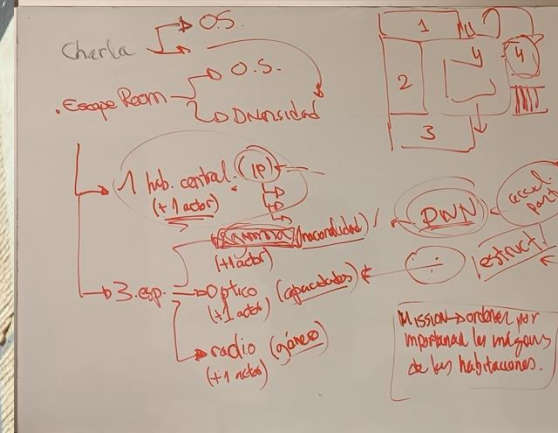


# Planning





# Planning





# Planning

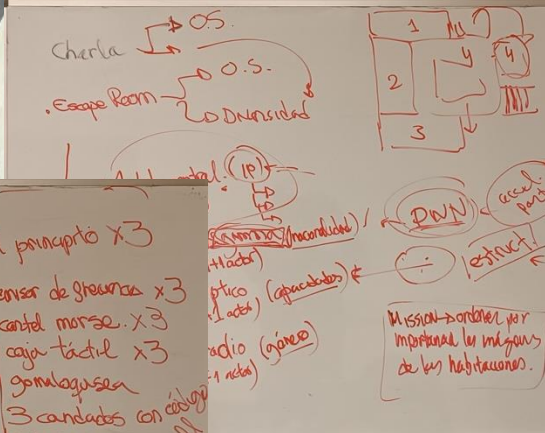


**COSAS QUE NECESITAMOS:**

- Linternas normales → 6
- " UV → 3
- Rotulador UV → 1
- Radios → 3
- Pilas → 1 pack para cada radio

**RADIO:**

- ① VISUAL: Lentes / Linternas → I.F.
- ② Auditivo: Radio\* USB ⇒ canción vibrando el cartel (lo hace el agua)
- ③ TÁCTIL:













# Production



# Production





# Production

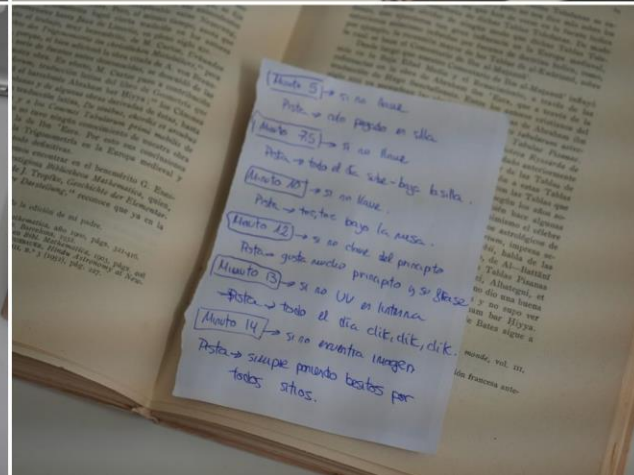


# Production

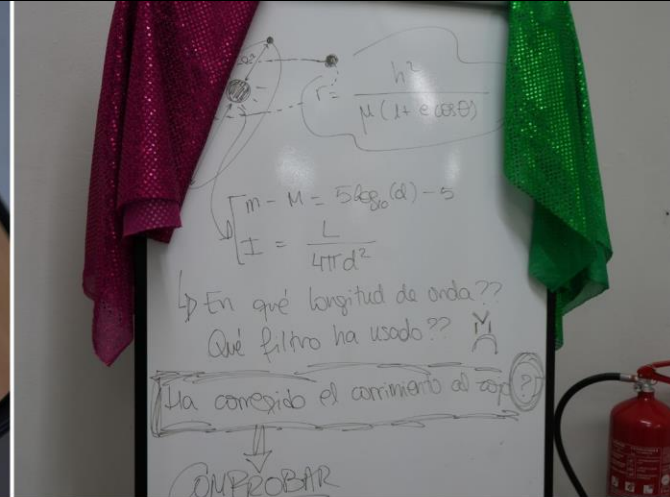
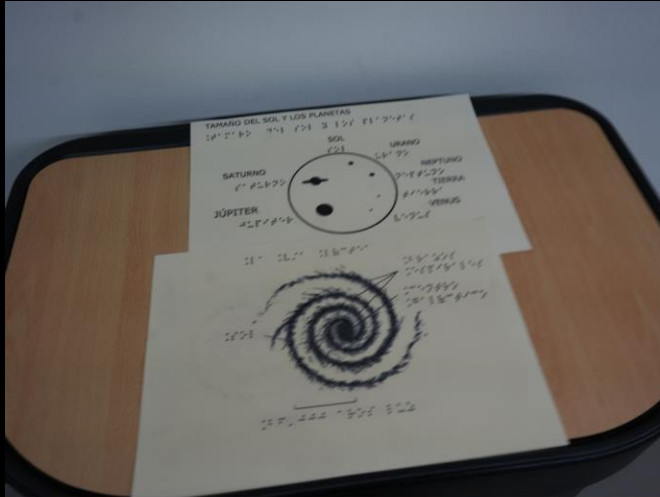




# Production



# Production





# Lights, ~~camera~~ public, action!



# Lights, ~~camera~~ public, action!





# Lights, camera public, action!



# Lights, ~~camera~~ public, action!





# Lights, ~~camera~~ public, action!



# Evaluation



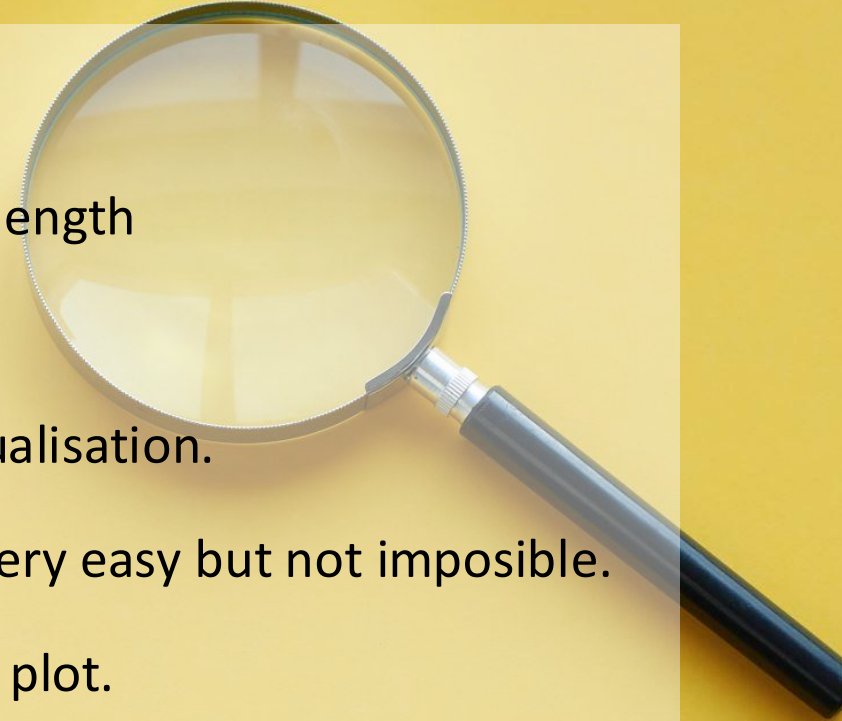


# Evaluation or something like that



# Evaluation or something like that

- “Scientific ambush”.
- 3 teams links directly with multiwavelength astronomy.
- They liked the story used for contextualisation.
- Typical Escape room situations. Not very easy but not imposible.
- They would like a more detective-like plot.
- Problem with timing.
- Final messages were not totally clear.
- They missed a great end.





# Take away tips

- Involve actors/actresses & escape room professionals.
- Avoid scientific or technical games
- Control external stuff
- Make the rules clear
- Think of solutions to fit the time
- Try to control kids & parents
- Avoid too much things
- Find a place and repeat it.



# To be continued...

- Version for high-schools.
- More games related to the infrastructures.
- Co-creation of new challenges and games.
- Involve students.
- Offer the activity to other groups.
- Look for funding

Credits: Universal City Studios, Inc.



# To be continued...

- Version for high-schools.
- More games related to the infrastructures.
- Co-creation of new challenges and games.
- Involve students.
- Offer the activity to other groups.
- Look for funding.



**BACK** ←  
**IN THE**  
**FUTURE**

Credits: Universal City Studios, Inc.  
[Textstudio Font generator](#)

# Acknowledgments

The coordination of the participation in SKA-SPAIN is funded by the Ministry of Science, Innovation and Universities (MICIU)



AMIGA8 Grant PID2021-123930OB-C21 funded by



TED4SKA Grant TED2021-130231B-I00 funded by



RedSKA Grant RED2022-134464-T funded by



CSIC4SKA grant INFRA24023 funded by





# Summary

- Escape rooms allows to bring science through gamification to a wider public than other activities.
- But they need to be adapted to a specific target group.
- Need a lot of time for planning (story, games, scripts), production (places, materials, decoration), testing (actors, groups) and setting up. (€€)
- Include: actors, a stress factor, surprises and a "Grand Finale"
- Test it as much as possible