

26th IPPOG meeting

**LOOKING FOR NEW INTERACTIONS
WITH DARK MATTER**
(or *injecting science EVERYWHERE*)

Prof. María Belén Lovino

Gerencia Física - Centro Atómico Bariloche (CNEA) & Universidad Nacional de Rio Negro
Patagonia Argentina - mblovino@unrn.edu.ar

how do I arrived here?? (the 26th IPPOG meeting)



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What do I do from Patagonia, Argentina?

- Science Communication (SC) focus of this presentation
- Studies on Public Perception (for my Master on SC)
- Physics Professor (teacher of teachers: Didactics, Astro-Bio-Cosmo)



Framework

- SC: promote specific behaviors towards science and technology
- My background is Education in Physics
(constructivist approach)

democratic citizenship behaviors,
science as a global social process open to dialogue

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A typical day

- I **“live”** among scientists (co-working)
- I **hear** and **engage “real time”** conversations about scientific research
- I am **deeply immersed in the concepts** to be communicated
- **Inspiration** also comes at the time you dive into the concepts and relations
- **Thinking very carefully** about how to invite OUTSIDERS to participate (artists, designers, merchants, artisans, producers, game fans)

critical phase and usually one shot.

but, what does this means??

*“You won’t work for me. This is co-production. Everyone will work.
If you want, you will have your own space at our co-working office”*

I recognize, know, want to learn and value your own interests
(art, money, publicity, creativity, disruption, prestige, to be value as an expert, etc, etc, etc.)

Know me: “My interest is Science Communication”.... also dogs, croissants, coffee, wine, not chocolate at all, no pineapple on pizza!

Present a *list of things i don’t have and I probability wont*: money, artistic abilities,
commercial abilities, a big target audience, followers
and everything related to bureaucracy will take (probably) more than you expected.

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MY INTERACTIONS WITH **DARK MATTER**

(some examples of the work we made in the past two years)

- Card Games
- Dark Matter Ice Cream
- Comic
- Puzzle
- Fashion (clothing)




Me + Astrophysicis Researchers + ...

Phd Students
designers
illustrators
merchants
ice cream artisans
game fans
school students
teachers
....

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Injecting science in **CARD GAMES**

- Card games fans are on  : huge communities of people creating fan-made content just for fun and open to new ideas
- Specific target (f.e: fans of Arkham Horror, Marvel) already exists
- Amazing quality of products (graphics, media, gameplay)

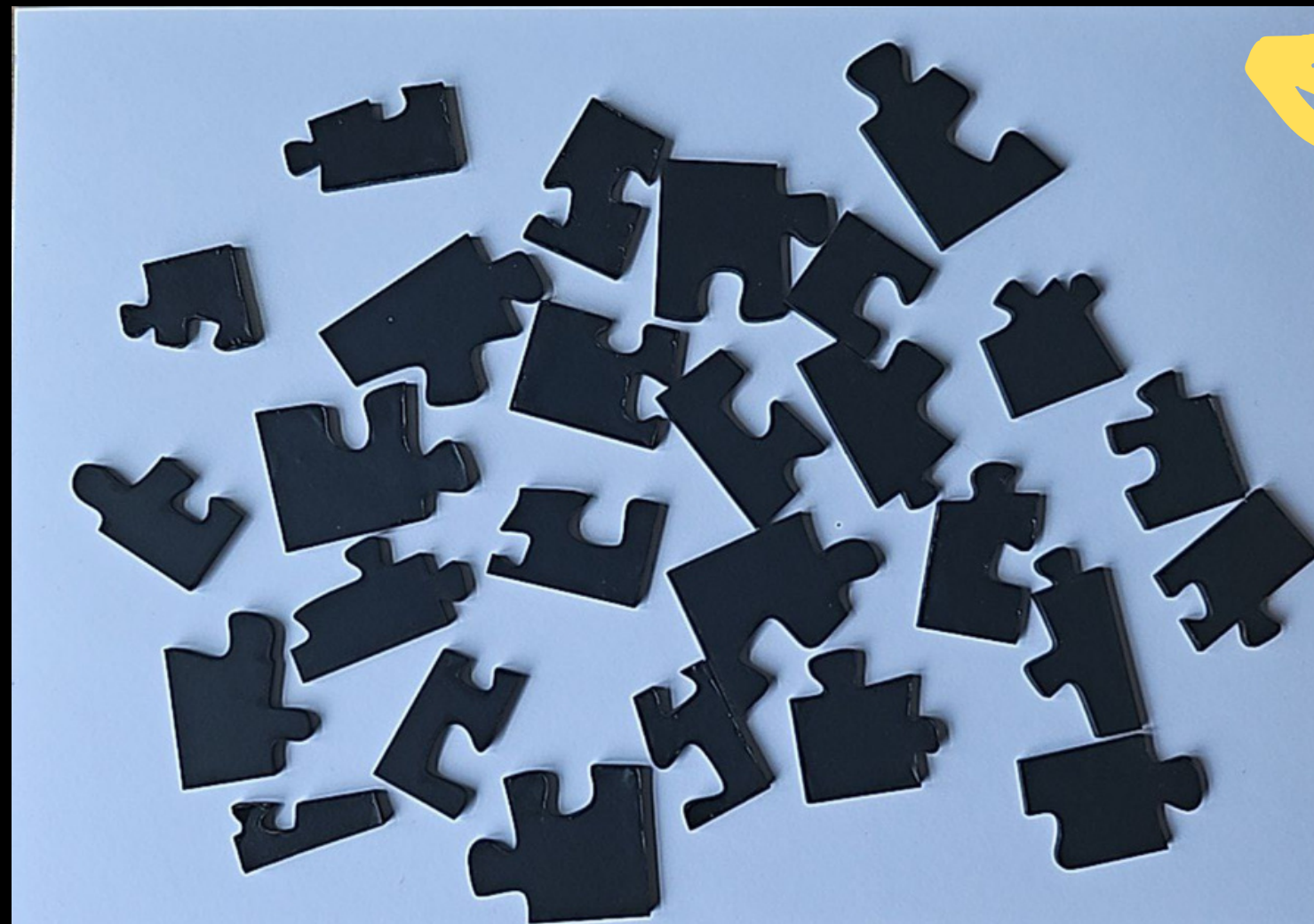


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Injecting science in **PUZZLE**

We invited a group of local entrepreneurs to co-create objects that teach you about the scientific process. It's been a 8 month travel with incredible creations!



- We expect to launch pre-sales Feb 2024
- This idea was theirs
- not something we told about research process



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Injecting science in **ICE CREAM**



The ice cream is based on a secret formula. We discussed dark matter with casual participants, and they have to judge whether the ice cream captures the essence of dark matter or not.

The formula is secret but people discuss:

It is chocolate with vanilla

It is blueberry with cacao

It is vanilla and a fruit

It is some kind of fruit with coco

the texture is not like a regular ice-cream. this is different

i will go home without really knowing? how is this possible?

this is not the same ice cream that we tasted last year

i don't know what this is

is this chocolate?

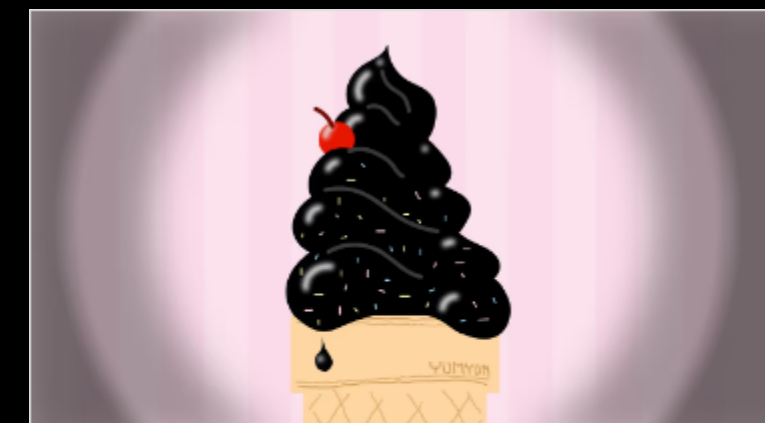
I am 100% sure it is not chocolate

So, isn't it similar to the situation when you research dark matter??

*Was featured in "symmetry magazine",
(among with others ideas I coordinated in latinamerica)*

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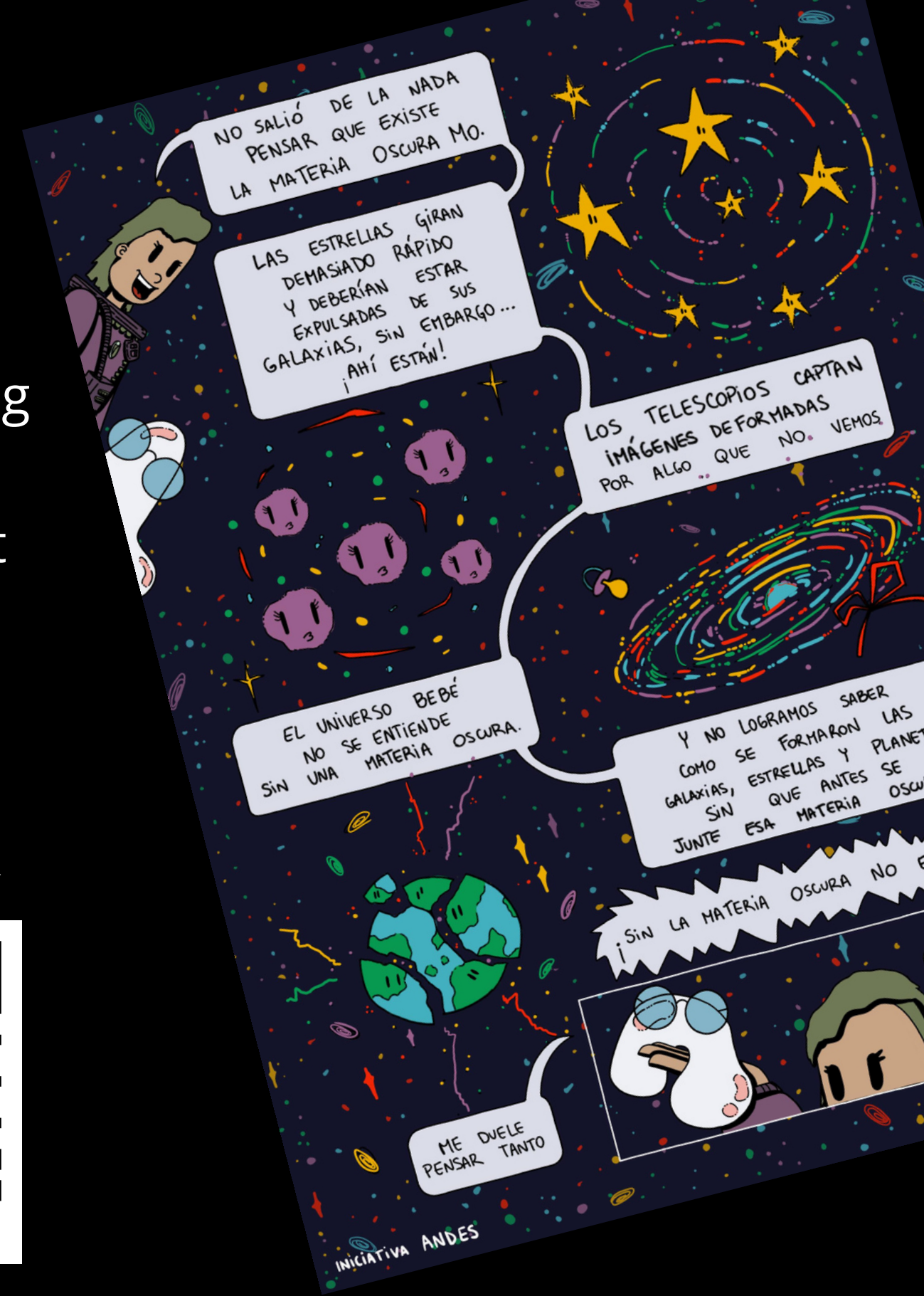
Celebrating Dark Matter Day in Latin America

Scientists, artists, communicators and physics fans find creative ways to mark the unofficial holiday

Interactions with COMICS

- The artist became member of our co-working space for 15 days
- 8 page comic, exposed as gigantic posters at Tecnópolis, the major argentine science fair

I NEED TO KNOW: THE HIDDEN MATTER
(SPANISH VERSION)



Artist Camila Sangiorgi IG: @K.A.M.C1

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Injecting science in **FASHION** **PRELIMINARY**

The designer



Panni Margot



The voyage

- Telephonic contact (not made by me!) (oct 2023) ✓
- A video call (oct 2023) ✓
- A whatsapp group with conversations about life and random stuff (nov 2023) ✓
- Invited to stay 5 days in co-working space (4-8 dec 2023), he will become a member of our team (hear, engage, propose, teach us, learn, discuss)
- Evaluation: How do we feel? do we want to continue? (dec-jan) Whats the new plan?
- ...
- someday, end up at the Paris fashion week?

His own ideas



(we cannot make it public yet)

also my ideas

"From heaven to Underground"

Inspired in TAUP 2019 Toyama's flag



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CONSIDERATIONS ABOUT THIS APPROACH

- **Boundaries:** Usually small groups (3-6)
- **Time:** it takes a lot of time to co-produce (>6 months)
- **Risk:** a team ready to deep dive into disruptive ideas
- **Evaluation:** long term impact

- **Requirements:** a working group in which you have the freedom to explore and consider "live", "hear", "engage", "immersion" and "inspiration" as work itself.
- **Requirements (II):** a group understanding you will make little or none of the traditional activities they expect in your position (visits, masterclass, nets, news, talks, etc, etc).
- **"Healthy group"** (*Grupo Sano*, Barreiro, T. 1993) (live and believe)

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MY PERSPECTIVES

- Explore new ways to **inject science**
- **Share** my ideas and hear other ideas
- Continue to improve my professional training (get my master Feb-Mar)
- Continue to building **networks of trust** for future collaborations
- **Improve** my evaluation process
- Continue **to explore the frontier** between communication and education
- **Navigate** an unfavorable local context for SC (Argentina), and survive

- To be present at next year IPPOG meeting! Learn more about this community.

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THANK YOU VERY MUCH!

*Are you interested in
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let's collaborate!*

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