

CMS

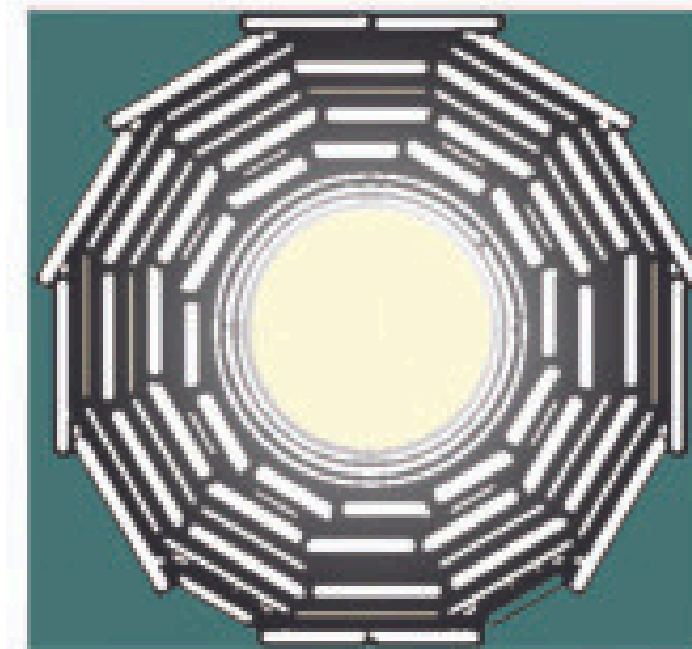
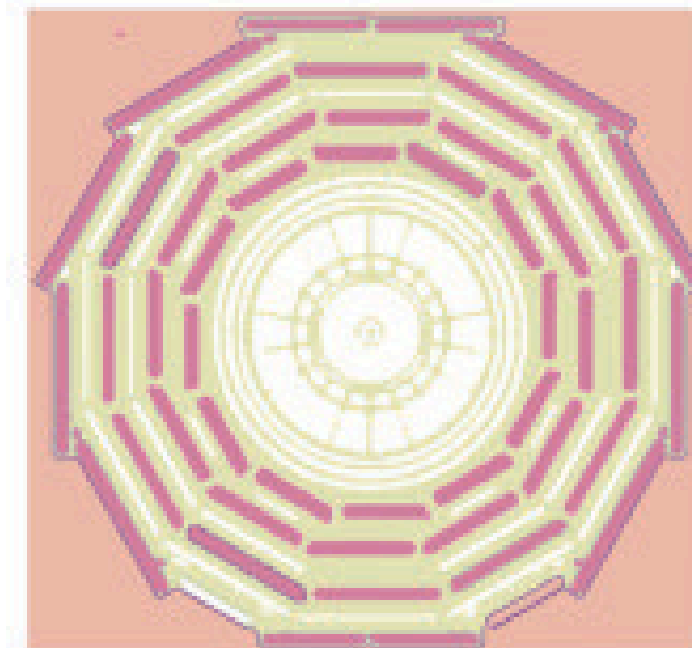
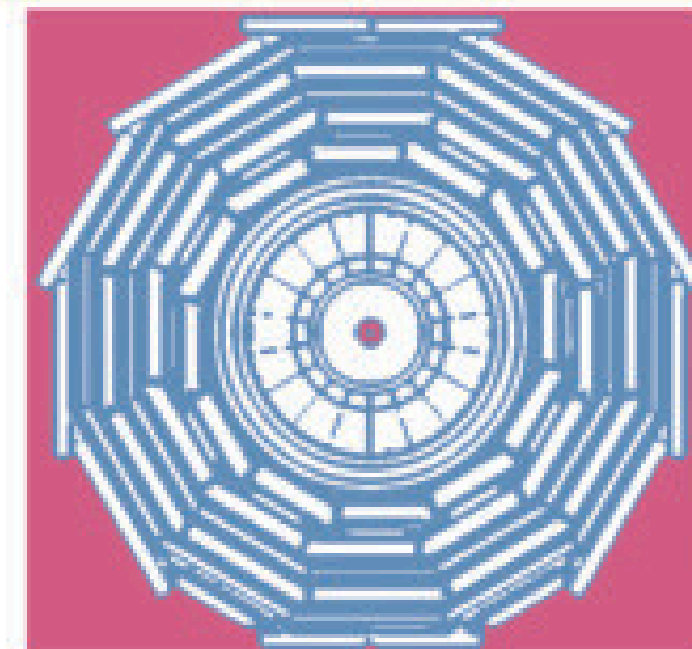
SCAN ME



# Creating a new CMS Strategy for communications

Sofia Hurst on behalf of the CMS Collaboration

[cms.comms@cern.ch](mailto:cms.comms@cern.ch)



# The Core Team

## Head of External Communications

David Barney

## Deputy Head of External Communications

Marina Passaseo

## Comms & Outreach

Sofia Hurst  
Nefeli Stathaki  
Thomas McCauley

## Physics Communication

Ansar Iqbal  
Andrés Delannoy



# The Plan

**Why create a new strategy?**

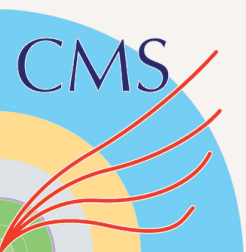
**How we went about it**

**Our key pillars / guiding stars**

**The challenges and how we are addressing them**

**The work we still have left to do**

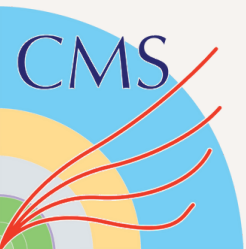
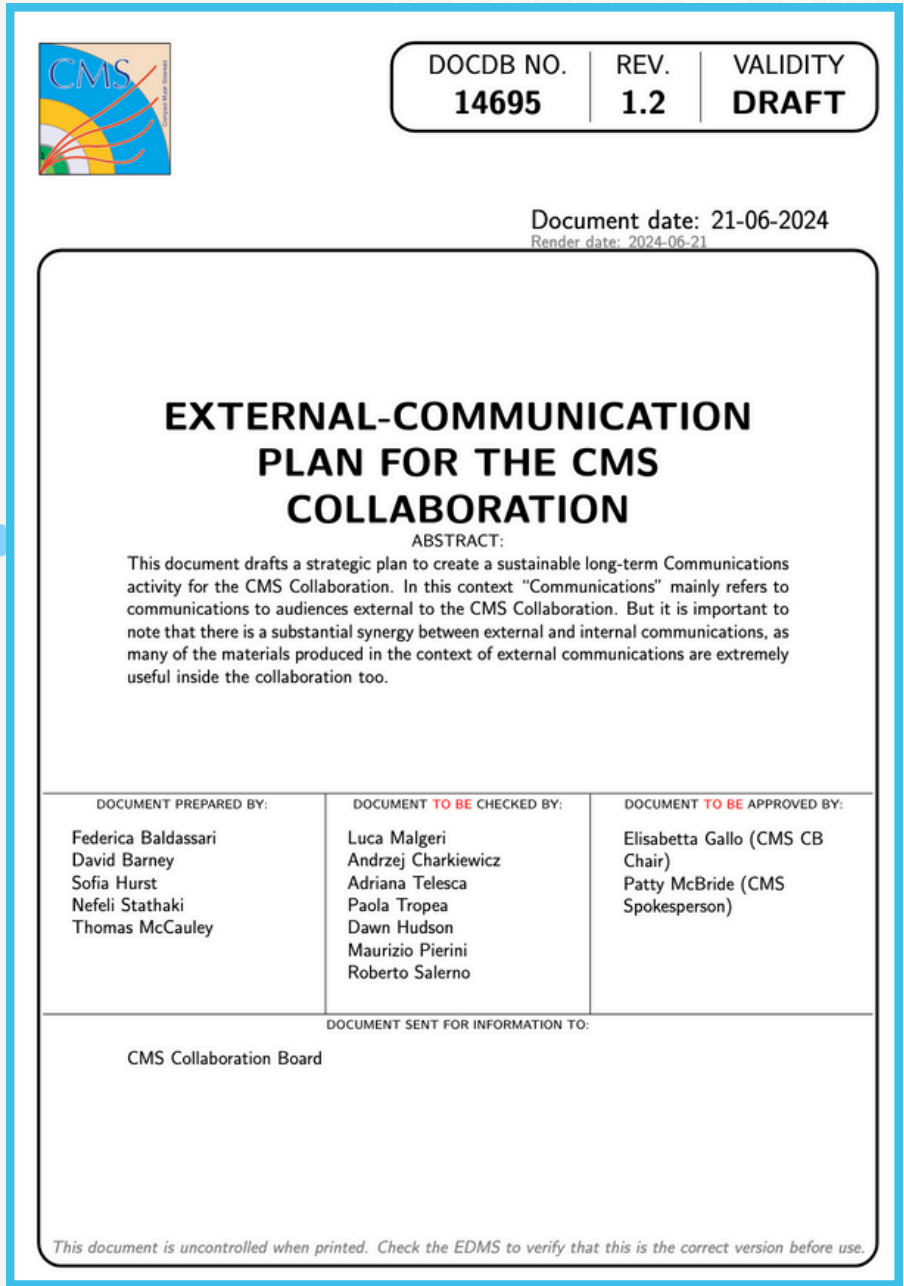
**An ask for you**



# Our Why

- External **pressures on High Energy Physics** are currently making the future of the whole field very difficult. We need to be more effective than ever at putting out CMS' work and showing who we are to a range of different audiences across ages, geographical locations, and understandings of physics.
- The wider world is much more rife with **misinformation and disinformation**, as these campaigns are easily amplified. We need to be a consistent **voice of reason and science!**

# The Document



# The Investigation Design Thinking

*Design thinking is a methodology that starts with **empathy for the audience**, and builds up from there. It offers a set of tools to really, deeply, **question problems**, and encourages **creative thinking** when coming up with solutions.*

“Designers don’t try to search for a solution until they have determined the **real problem**, and even then, instead of solving that problem, they stop to **consider a wide range of potential solutions**. Only then will they finally converge upon their proposal.”

*- Don Norman, author of The Design of Everyday Things*



# How we went about it

**Who What Wow**

**Who:** Our grandparents, PhD students, Everybody, Physics teachers, Physics students, High school students, Physics teachers, Under 16s.

**What:** Masterclasses, Outreach, Hands-on, Fun, Inspiring, Engaging, Challenging, Exciting, Interesting, Informative, Entertaining, Educational, Inspiring, Engaging, Challenging, Exciting, Interesting, Informative, Entertaining, Educational.

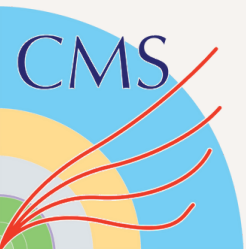
**Wow:** Inspiring, Engaging, Challenging, Exciting, Interesting, Informative, Entertaining, Educational.

**Key messages:** CMS is a worldwide collaboration made up of people from many different disciplines without whom it cannot function. CMS is worth the funds. CMS is a journey. Very little of our universe is understood and CMS helps us to understand more. CMS is worth the funds. Fundamental science is worth pursuing. CMS is a worldwide collaboration made up of people from many different disciplines without whom it cannot function. By joining CMS you can shape the future of HEP research. Add things on internal site. Austin? Music? Music artists?

**Follow up:** Visitorpath, UCLA proposal, Korean News, Newsletter, Photocast, Add things on internal site, Austin? Music? Music artists?

We used it to:

- **map out** the disparate parts of the communications landscape
- starting with the audiences, we pulled out the **key messages** and **guiding principles** for the team
- understand the **underlying problems** causing painpoints for the team and creatively approached how to address them



# Key Messages

The Public are fascinated by our research.  
Particle physics is the modern equivalent of  
“where are we going?”

*Fabiola Gianotti at ICHEP panel session 2024*

# Key Messages

WE SHOULD  
**CELEBRATE CMS**  
AS A JOURNEY

FUNDAMENTAL  
SCIENCE IS  
**WORTH**  
**PURSUING**

CMS IS A **WORLDWIDE**  
COLLABORATION OF PEOPLE  
FROM MANY **DIFFERENT**  
**DISCIPLINES**, WITHOUT  
WHOM IT WOULD NOT  
FUNCTION

**CMS IS WORTH**  
**THE FUNDS**

VERY LITTLE OF OUR  
UNIVERSE IS UNDERSTOOD  
& **CMS HELPS** US TO  
UNDERSTAND MORE



# Key Messages

VERY LITTLE OF OUR UNIVERSE IS  
UNDERSTOOD & **CMS HELPS US TO  
UNDERSTAND MORE**

FUNDAMENTAL SCIENCE IS **WORTH PURSUING**



# Key Messages

VERY LITTLE OF OUR UNIVERSE IS  
UNDERSTOOD & **CMS HELPS US TO**  
UNDERSTAND MORE

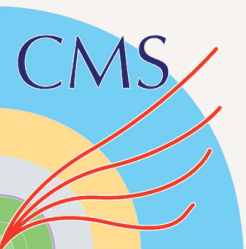
FUNDAMENTAL SCIENCE IS **WORTH PURSUING**



# Key Messages

WE SHOULD CELEBRATE CMS AS A **JOURNEY**

CMS IS A **WORLDWIDE** COLLABORATION OF  
PEOPLE FROM MANY **DIFFERENT DISCIPLINES**,  
WITHOUT WHOM IT WOULD NOT FUNCTION



# Key Messages

WE SHOULD CELEBRATE CMS AS A **JOURNEY**

CMS IS A **WORLDWIDE** COLLABORATION OF  
PEOPLE FROM MANY **DIFFERENT DISCIPLINES**,  
WITHOUT WHOM IT WOULD NOT FUNCTION

# Key Messages

## CMS IS WORTH THE FUNDS

“...the higher the awareness of CERN, the higher is the likelihood of paying for its research activity.”

F. Giffoni, M. Florio



# Guiding Principles

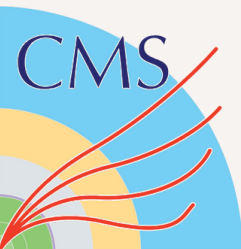
## Sustainability

Activities should be **sustainable in the long term** meaning that they can be actioned and improved over time with the resources available.

## Adaptability

Activities should have a **well defined audience**, but, where possible, should be **adapted to fit with other audiences** and channels.

The diagram illustrates the adaptability of CMS content across different platforms. It starts with a screenshot of the 'CMS Women for Science' blog on 'The Cylindrical Onion' website, dated 10 February 2023. The blog features a grid of six women: Silvia (Spanish), Patricia (English), Nadjeh (Arabic), Freya (Dutch), Chayanit (Thai), and Stephanie (French). A dashed blue arrow points from the blog to a YouTube video titled 'CMS Women - Steffi', which shows a woman speaking. Another dashed blue arrow points from the YouTube video to a social media post (likely Twitter) featuring the same woman and the text 'and in particular physics and particle physics'.



# The Pain Points

We aimed to:

- see what was working and make sure to keep doing it, or do it more
- see what was **NOT working** and uncover why that was the case
- see what gaps in our activities existed and decide how to fill them

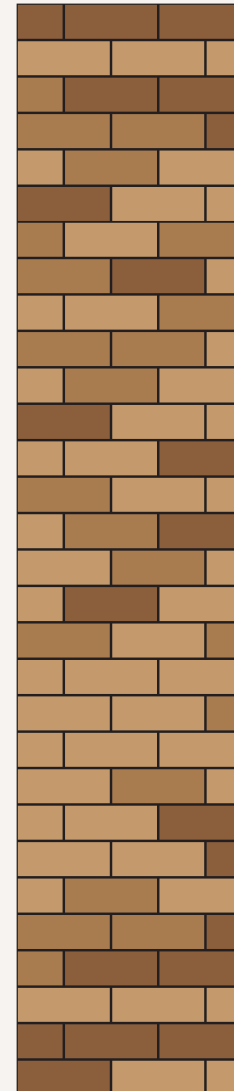
By continually asking why something painful in one of our processes existed, we identified several underlying problems and worked to address them. We look at three examples in the following slides.



# #1 Information Flow

Surface level pain points indicated that there was an issue with information flow from the many CMS teams to the communications team!

The Comms Team had to rely on one or two people to ask about what was happening, and often too late to do much about it.



# #1 Information Flow

We moved to a system where we have contacts across the different areas of CMS that let us know what is going on and help to collect the key stories from their teams!

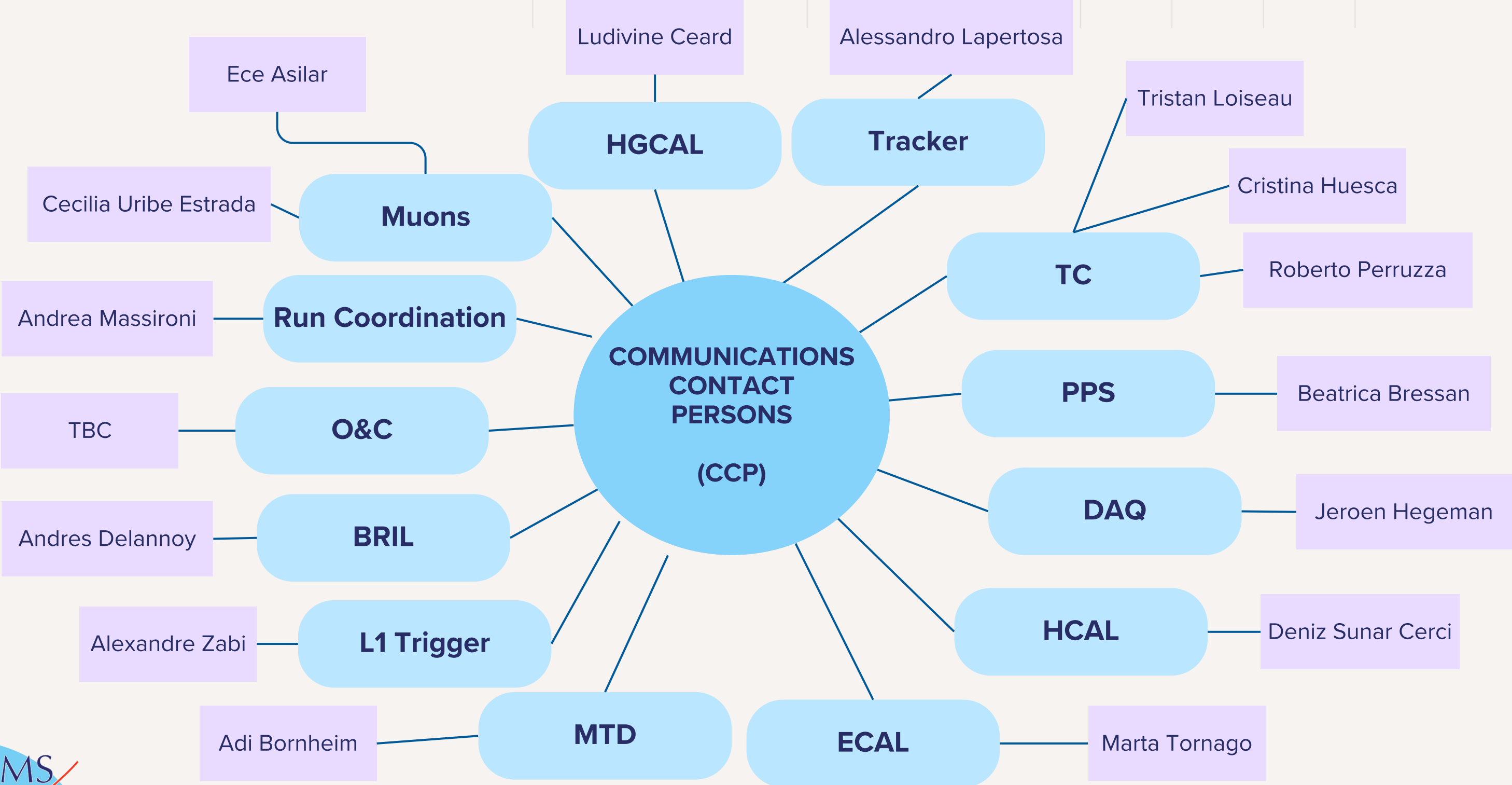
We call them CCPs - **Communication Contact Persons**



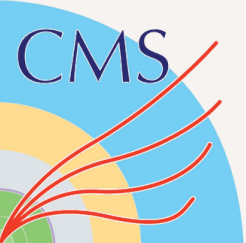
*Some of the photos and stories collected through the CCPs*

The challenges and how we are addressing them

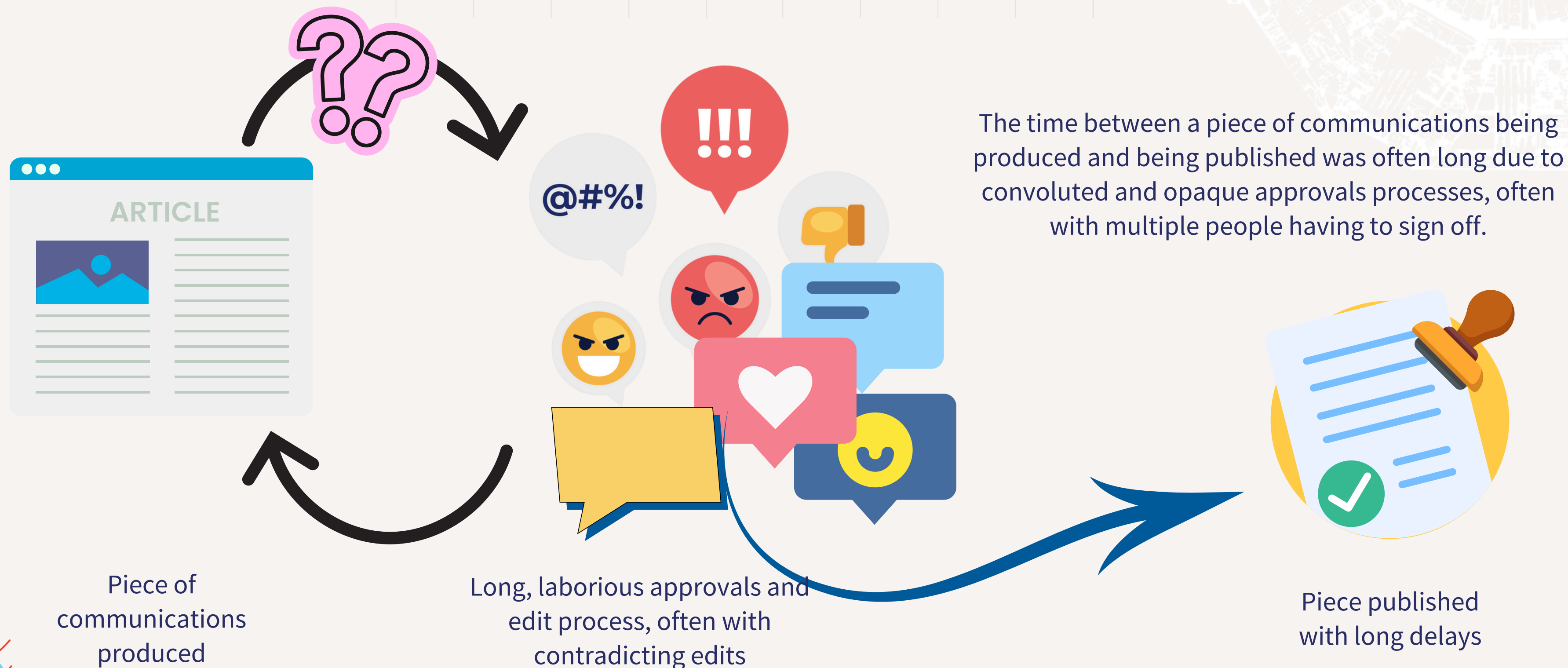
#1 CCPs



- feed information about important milestones to the central communications team for articles, pictures, videos, timelapses etc
- encourage their subsystems to create and share footage with the communications team e.g. through dedicated comms sessions
- collect entries for the image of the month competitions

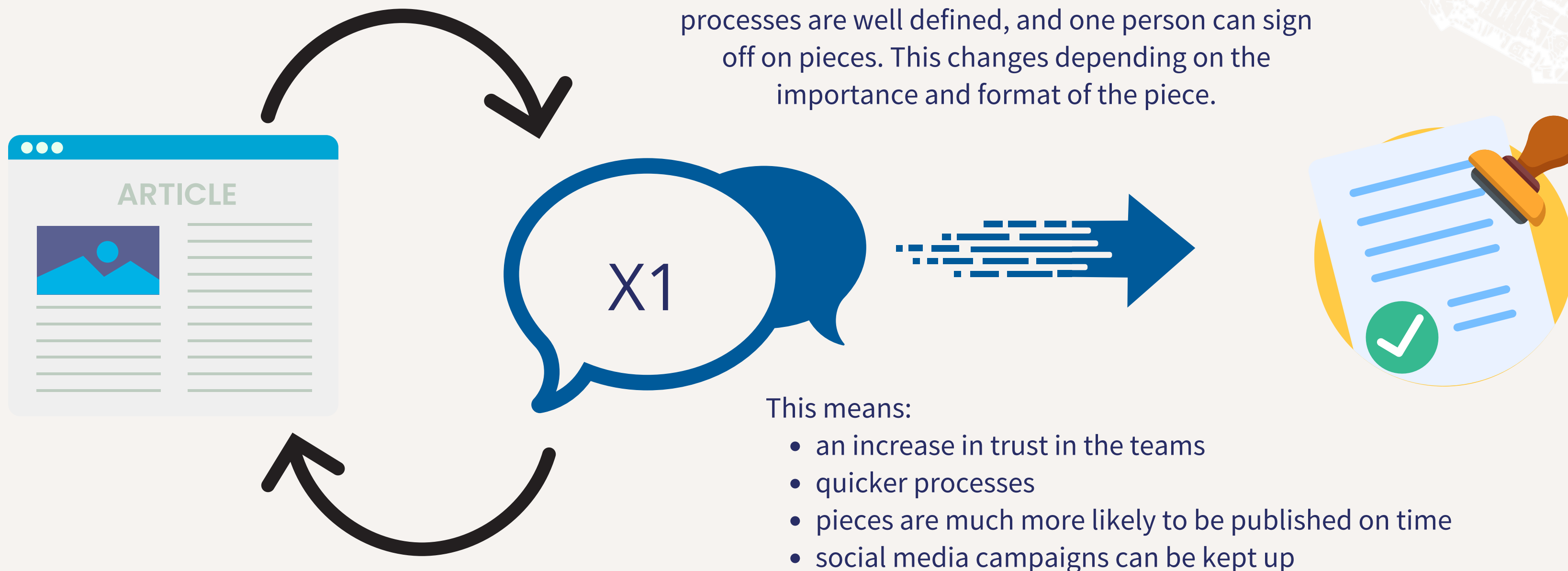


# #2 Time to Publish



# #2 New Editorial Process

The new editorial process means that the approvals processes are well defined, and one person can sign off on pieces. This changes depending on the importance and format of the piece.



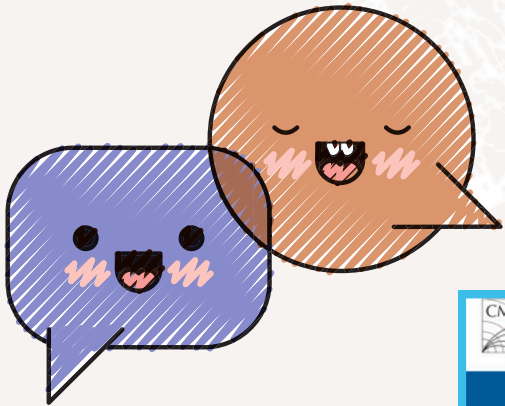
# #3 Top-Down

Passively posted information and very little interaction meant that the audiences, both internal and external, could not engage with us in a meaningful way.



# #3 Shift to Dialogue

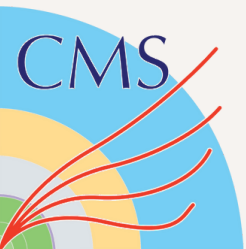
Creating dialogical relationships .....*for example*.....>Being social on socials!



Delivering information in a more targeted way .....>Point Cinq CMS Newsletter



Proactively reaching out to specific audiences with dedicated materials .....>Local events



# Has it worked?

The strategy document passed through the collaboration board in late 2023...

In 2024, we had:

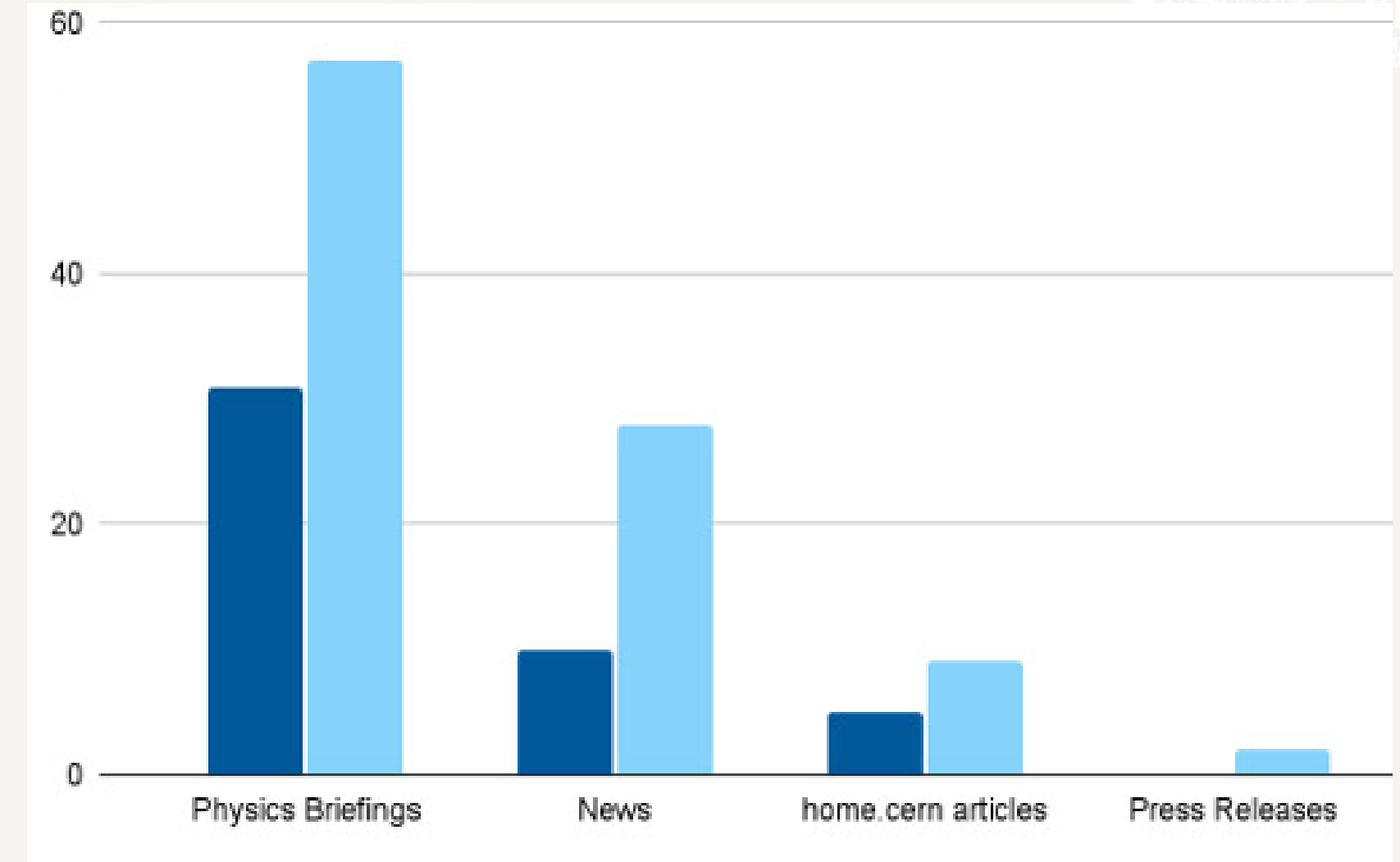
**More** articles

**More** social media posts  
(and more platforms!)

**More** CMS events organised

**More** time lapses & photographs

**More** of CERN's coverage for wider  
journalists to pick up on



# Has it worked?

But what we like to see most of all are moments like this:

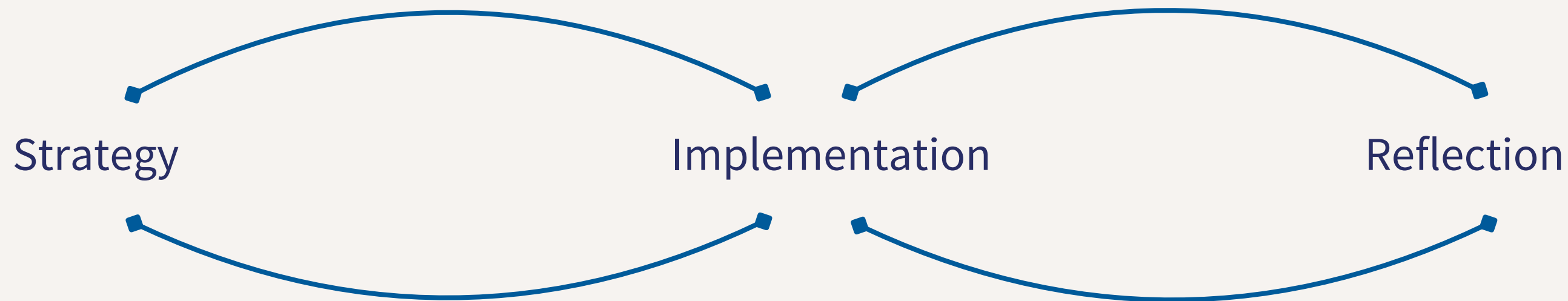
*Bonjour,  
Moi c'est Sacha,  
J'ai 8ans, j'ai aimé la visite, la rapidité de l'ascenseur, c'était impressionnant.  
J'aurais aimé qu'on m'explique avant les protons et les électrons, car c'est un grand mystère, car **j'ai envie de devenir scientifique.***

*On a pas vu ça à l'école primaire.  
Sacha*

*Hello,  
I am Sacha,  
I'm 8 years old, I loved the visit, the speed of the lift, was impressive.  
I would have liked to have had protons and electrons explained to me before, because it is a great mystery, because **I want to become a scientist.**  
I had never seen this in primary school.  
Sacha*



# A long way to go



- **More is not always better** when we have such a tight team - we are shifting to a greater focus on prioritisation and quality especially in terms of physics briefings
- We are now in a situation where we have **too many things** to post sometimes!
- As activities become more efficient in this team, we need to maintain some sort of **documentation** as we go along so that future handovers can be smooth.

# Some questions for you when we chat after this:

- What do you find useful interaction with experiments you are not part of?
- Have you implemented some of these in your own organisations?
- When creating a strategy, what kinds of analysis did you do?
- Let's collaborate! We love reaching people we don't usually reach and are keen to collaborate on socials or cross post articles - if you have an idea we are all ears.

And for us?

# Any questions for us?



Website  
[cms.cern](https://cms.cern)



Blog  
[cylindricalonion.web.cern.ch](https://cylindricalonion.web.cern.ch)



Social Media  
[@CMSExperiment](#)



LinkedIn  
[CMS Collaboration](#)



TikTok  
[@cms\\_experiment](#)

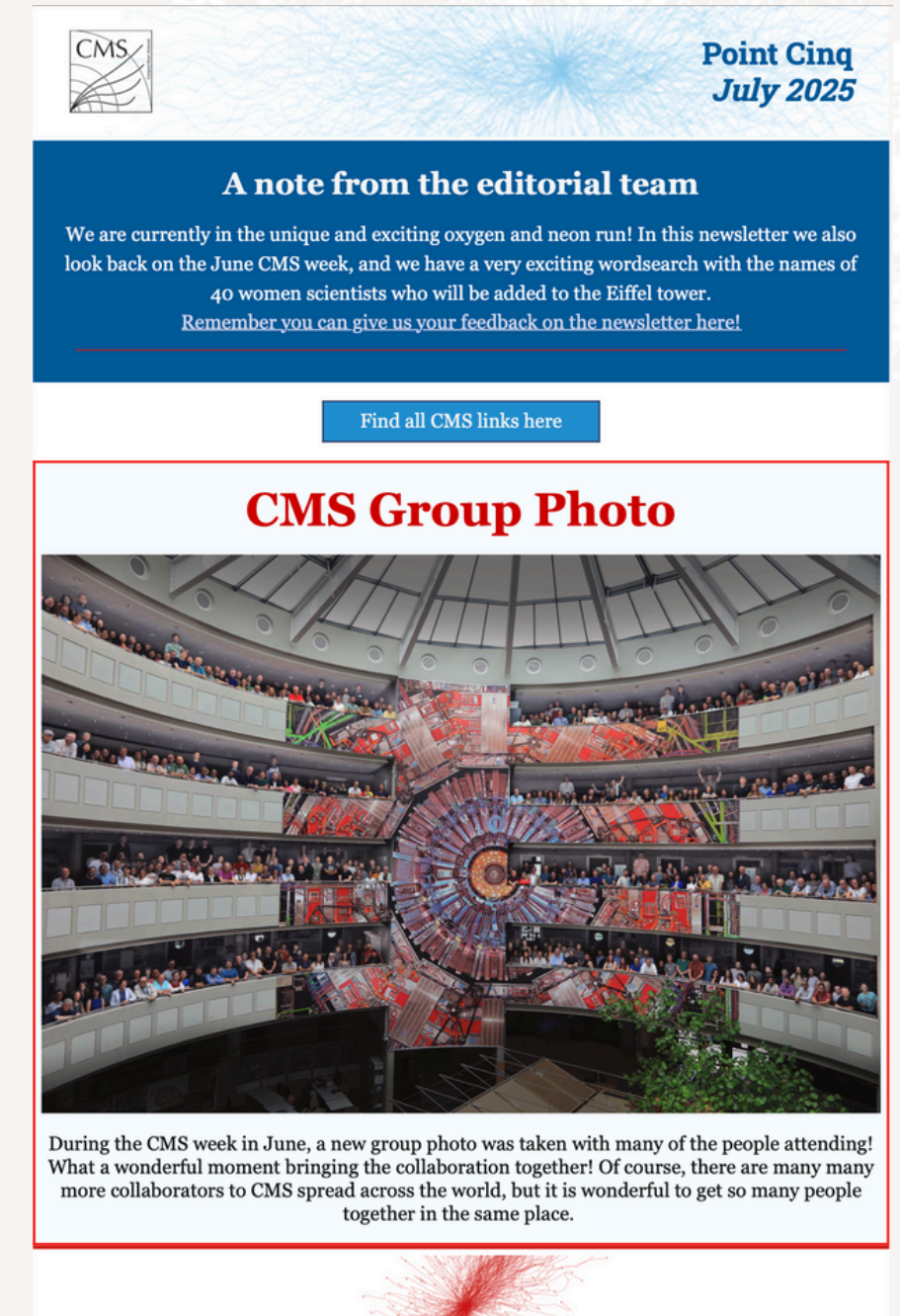
SCAN ME



# Back- up slides

# Subscribe to our newsletter!

- A monthly newsletter straight to your inbox
- Find out about all CMS news - including physics results, events, collaboration news, art initiatives, and award winners
- Take part in quizzes and stand the chance to win prizes



# Some interesting studies

“the higher the awareness of CERN, the higher is the likelihood of paying for its research activity.”

*“No relevant differences exist between the two countries [Switzerland and France] because the statistically significant determinants are the same. Apart from income and controlling for individual traits, they are related to the following issues: i) awareness of CERN; ii) scientific interest; iii) CERN permits to increase knowledge of universe; iv) The research activity at CERN should increase in the coming decades.”*

Francesco Giffoni, Massimo Florio,  
Public support of science: A contingent valuation study of citizens' attitudes about CERN with and without information about implicit taxes,  
Research Policy,  
Volume 52, Issue 1,  
2023,  
104627,  
ISSN 0048-7333,  
<https://doi.org/10.1016/j.respol.2022.104627>.

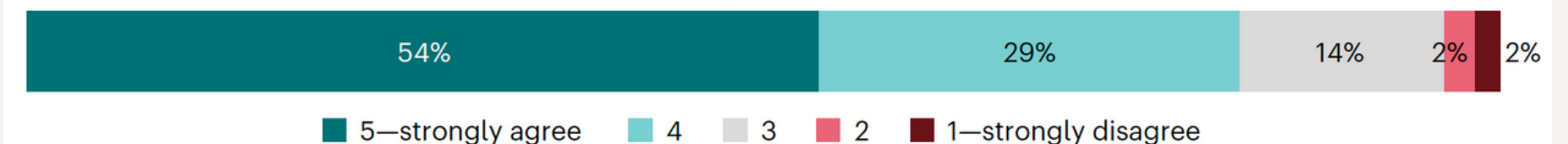
→ A study asking Swiss people what they would be willing to pay in taxation for CERN research and comparing it to similar survey done in France

“Anti-science attitudes, even if held by only a minority of people, raise concerns about a potential crisis of trust in science, which could challenge the epistemic authority of science and the role of scientists”

Cologna, V., Mede, N.G., Berger, S. et al.

“Public perception of scientific integrity—one of four components of trust—is somewhat high, but perceptions of scientists' openness are lower. Therefore, scientists wishing to gain public trust could work on being more receptive to feedback and more transparent about their funding and data sources, and invest more effort into communicating about science with the public—which we found to be desired by 83% of respondents. We recommend avoiding top-down communication but encouraging public participation in genuine dialogue, in which scientists seek to consider the insights and needs of other societal actors.”

Scientists should communicate about science with the general public.



Cologna, V., Mede, N. G., Berger, S., Besley, J., Brick, C., Joubert, M., Maibach, E. W., Mihelj, S., Oreskes, N., Schäfer, M. S., Abdul Aziz, N. I., Abdulsalam, S., Shamsi, N. A., Aczel, B., Adinugroho, I., Alabrese, E., Aldoh, A., Alfano, M., Ali, I. M., . . . Zwaan, R. A. (2025).

Trust in scientists and their role in society across 68 countries.

Nature Human Behaviour, 9(4), 713-730.

<https://doi.org/10.1038/s41562-024-02090-5>

