

Communication & Social Media report 28th IPPOG meeting

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Scientific Secretary and Communication Officer

CERN, 26 November 2024



- Newsletter
- Social media report
- Website news
- Inspirational Success Stories
- Goodies
- Annual Report



1st July 2024



Welcome to the IPPOG Newsletter!

We are thrilled to present our first newsletter,
packed with updates and news about IPPOG's activities!



We are pleased to
share with you our
annual report 2023.
You can view it on
ipog.org

Conferences 2024

IPPOG will be attending the following conferences.
Don't miss the opportunity to meet our team and learn more about our activities.

**LHCP2024 Large Hadron
Collider Physics
Conference,**
3-7 June 2024,
Boston, Massachusetts,
USA

"Hands-on particle physics,
an overview of the
masterclass efforts"

**EDULEARN 18th Annual
Conference on Education
and New Learning
Technologies,**
1-3 July 2024,
Palma de Mallorca, Spain

"International Masterclasses
in Particles Physics – From
Colliders to Medical
Applications"

**ICHEP2024 42nd
International Conference
on High Energy Physics,**
18-24 July 2024, Tsinghua,
Czech Republic

"International Masterclasses
in Particles Physics –
expanding geographically
and broadening 'scope"
"IPPOG and spin-offs from
particle physics"

Lattice 2024,
Liverpool, UK, 28 July-3 August 2024
"Particle Physics outreach highlighting
IPPOG"

**Conference on Quark Confinement and
the Hadron Spectrum,**
19-24 August 2024, Cairns, Queensland,
Australia

- Successful deliveries: 93% (43)
- Open rate: 77.5%
- Bounced: 3
- Unsubscribed: 0
- Link clicks: 16.1%

<https://cds.cern.ch/record/2909917>



16th September 2024



Welcome back!

Many of you are returning to the office, while others are already back. With this second edition of our newsletter, whether you were working from experiment control rooms or spending time with your families, we'd like to extend a warm welcome back to all of you!

Hadron Therapy



Yiota Foka (Particle Therapy Masterclasses coordinator) presented the brand new Particle Physics Therapy Masterclasses during the latest edition of ICHEP in Prague.

You can find more information at this link: ippgo.org/news/ippgo-ichep-2024

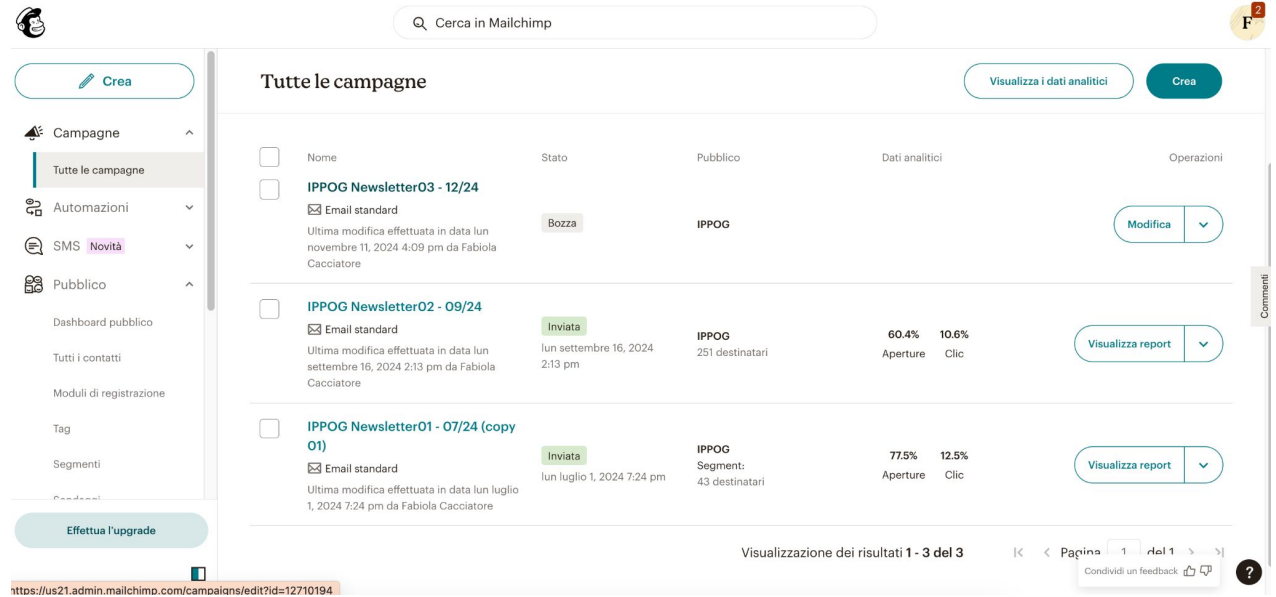
Those interested in this activity will also want to join the Hadron Symposium,

which will be held in Thessaloniki from October 19-21, 2024. Attendance can be either in person or online, and registration can be completed by following this link: indico.cern.ch/event/1431627

- Successful deliveries: 93.6% (257)
- Open rate: 57.9%
- Bounced: 16
- Unsubscribed: 0
- Link clicks: 47

<https://cds.cern.ch/record/2909918>

330 contacts



The screenshot shows the Mailchimp interface for managing campaigns. The left sidebar contains navigation options: Crea, Campagne (selected), Automazioni, SMS (Novità), Pubblico, Dashboard pubblico, Tutti i contatti, Moduli di registrazione, Tag, Segmenti, and Profili. The main area is titled 'Tutte le campagne' and features a search bar, 'Visualizza i dati analitici', and a 'Crea' button. A table lists three campaigns:

Nome	Stato	Tipologia	Dati analitici	Operazioni
<input type="checkbox"/> IPPOG Newsletter03 - 12/24	Bozza	IPPOG		Modifica
<input type="checkbox"/> IPPOG Newsletter02 - 09/24	Inviata	IPPOG	60.4% Aperture, 10.6% Clic	Visualizza report
<input type="checkbox"/> IPPOG Newsletter01 - 07/24 (copy 01)	Inviata	IPPOG Segment:	77.5% Aperture, 12.5% Clic	Visualizza report

At the bottom, it shows 'Visualizzazione dei risultati 1 - 3 del 3' and a pagination control for 'Pagina 1 del 1'. A URL bar at the bottom indicates the page is <https://us21.admin.mailchimp.com/campaigns/edit?id=12710194>.

Direct Link

<https://ippog.org/form/newsletter>



<input type="text" value="Please fill in this field."/>	Affiliation
Country	Title
Email	
<input type="submit" value="Submit"/>	

Website pop up

JOIN OUR NEWSLETTER →



← BACK

Newsletter

Name	Affiliation
Country	Title
Email	
<input type="submit" value="Submit"/>	

4 x year
(March - July - September - December)

**Please send us your news to
share with the IPPOG community**



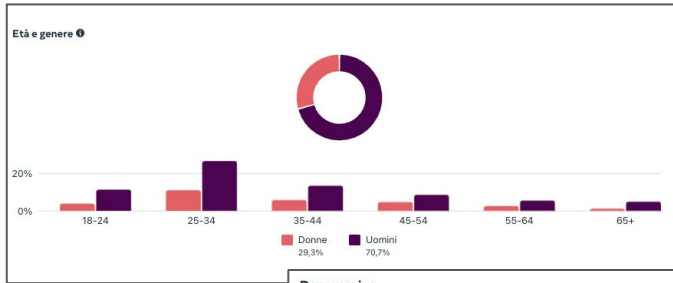
Who is the community (e-group)

The target audience for an IPPOG newsletter may include:

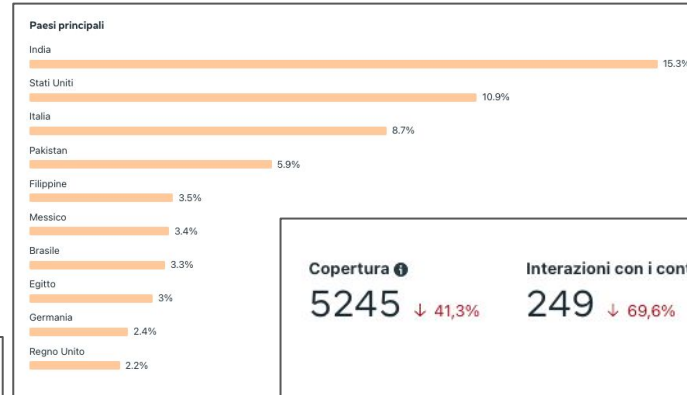
1. **Students and teachers of science and physics**, particularly at the secondary and university levels, interested in deepening their knowledge of particle physics.
2. The **academic community and researchers** in the field of particle physics and science in general.
3. **Science outreachers**, to promote collaborations or disseminate events related to particle physics.



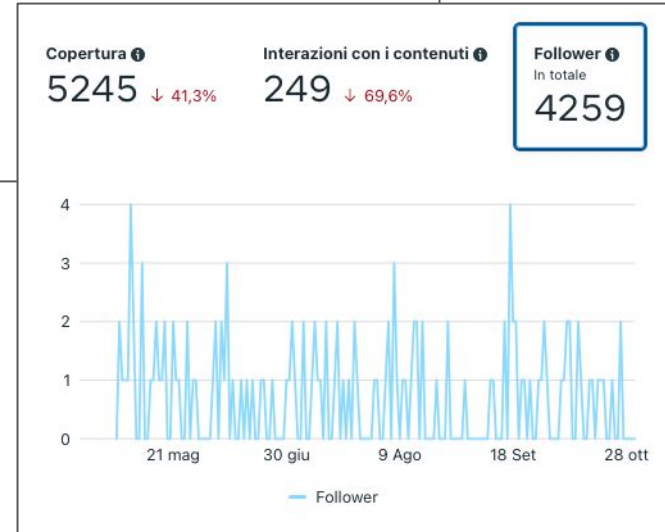
GENDER BALANCE



COUNTRIES



FOLLOWERS



Panoramica

Copertura **604** Impression **622** Interazioni **4** Clic sul link **--**

Superiori rispetto al solito Impression Superiori rispetto al solito Interazioni Come al solito Clic sul link --

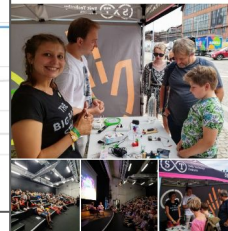
Copertura



We are happy to announce that also this year IPPOG supports The Big Bang Stage during the Color of Ostrea festival in @CecchiPublic.

Read about the festival and discover how to participate

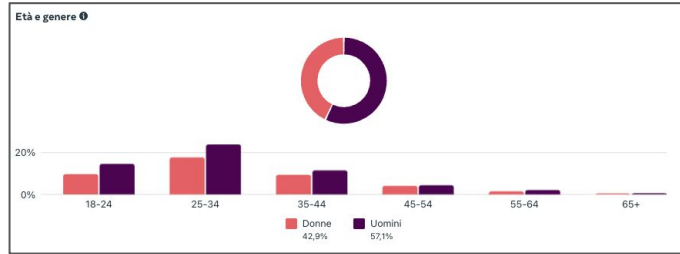
👍👍👍 — Altro...



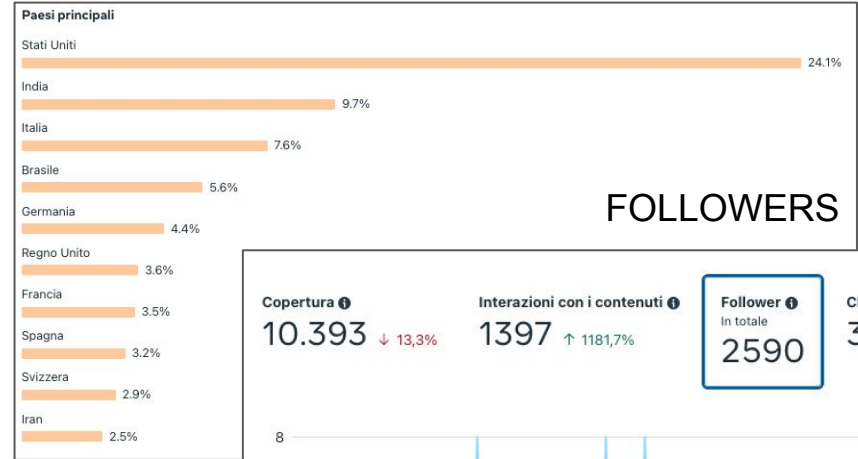
BEST POST



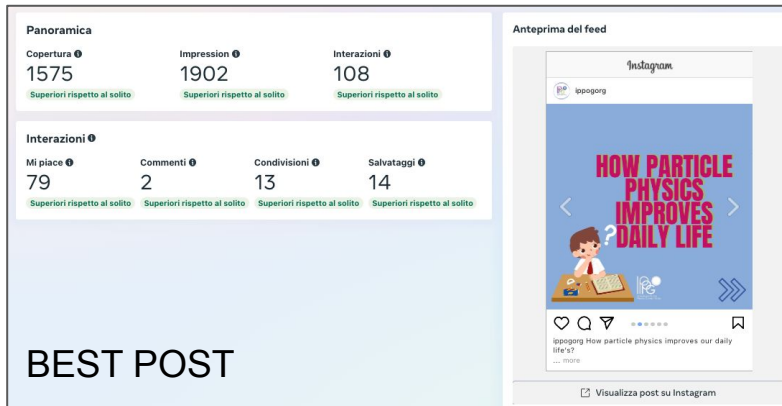
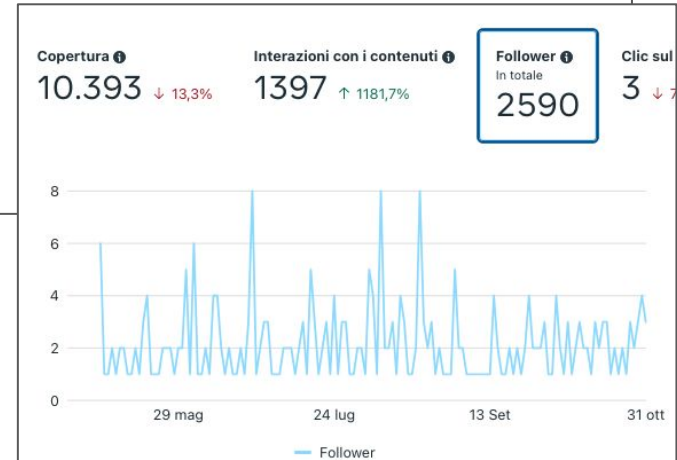
GENDER BALANCE



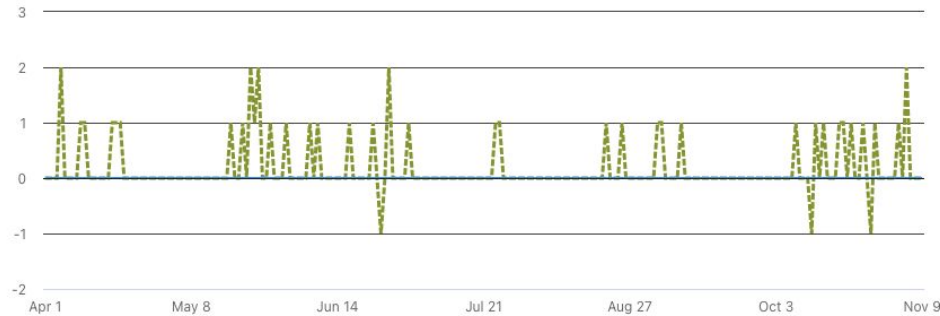
COUNTRIES



FOLLOWERS



Follower metrics 397 (+41)



Follower demographics

Location 

Geneva Metropolitan Area, Switzerland · 83 (20.9%)

Greater Madrid Metropolitan Area, Spain · 10 (2.5%)

Greater Rome Metropolitan Area, Italy · 10 (2.5%)

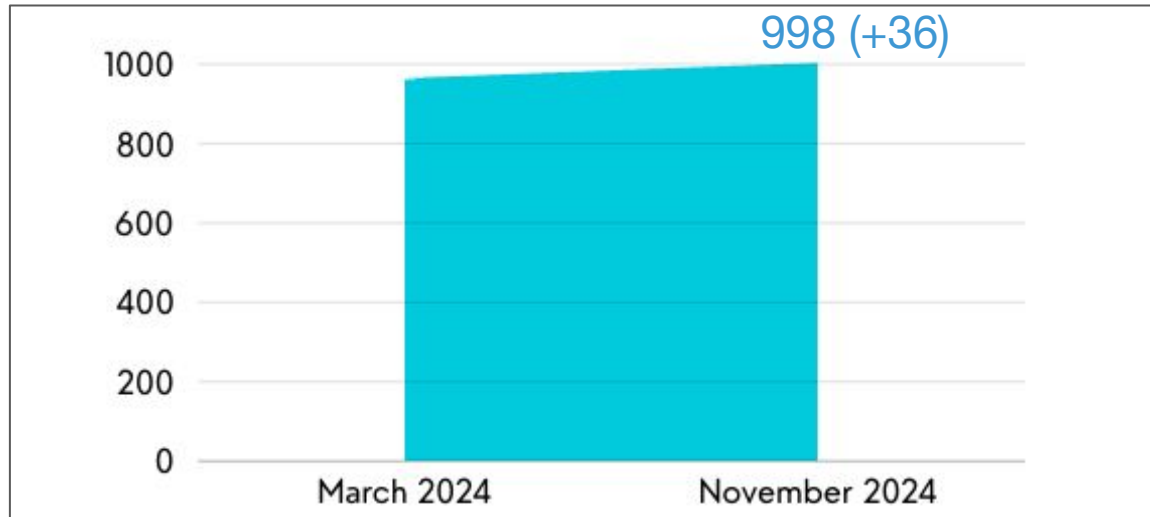
Greater Hamburg Area, Germany · 6 (1.5%)

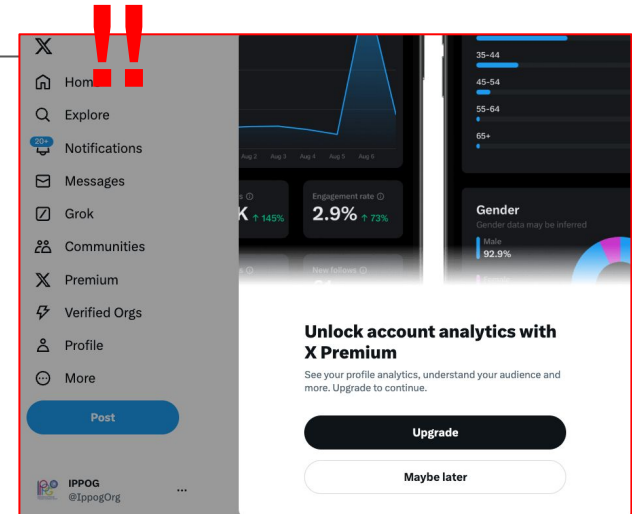
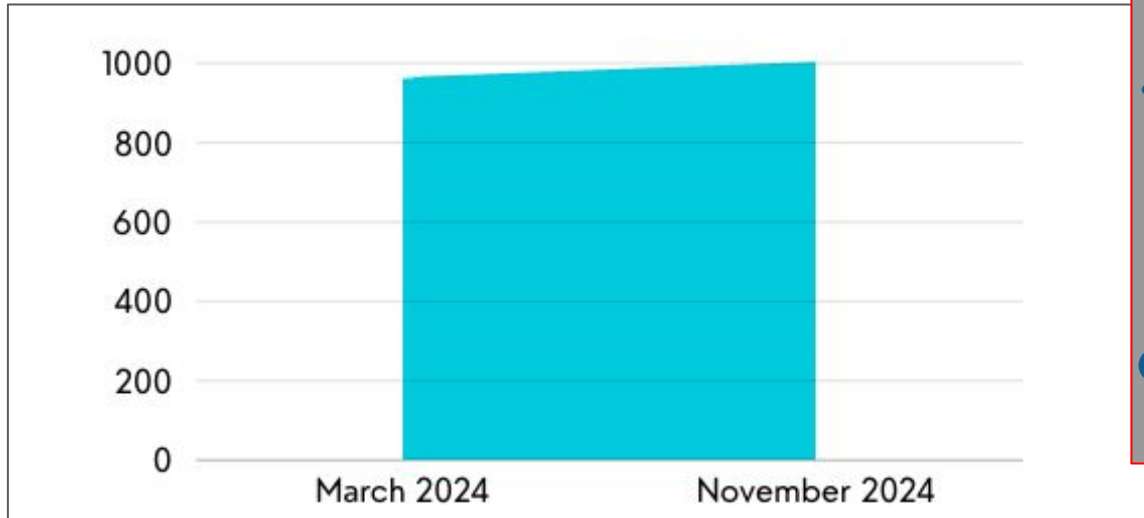
Zürich Metropolitan Area, Switzerland · 6 (1.5%)

Greater Milan Metropolitan Area, Italy · 6 (1.5%)

Lausanne Metropolitan Area, Switzerland · 5 (1.3%)

Greater Kolkata Area, India · 4 (1%)





Navigation menu:

- Home
- Explore
- Notifications
- Messages
- Grok
- Communities
- Premium
- Verified Orgs
- Profile
- More

Analytics overlay:

- Engagement rate: 2.9% (+73%)
- Gender: Male 92.9%

Promotional text:

Unlock account analytics with X Premium
See your profile analytics, understand your audience and more. Upgrade to continue.

Buttons: Post, Upgrade, Maybe later



12 news shared since May 2024

Main news:

- The difference between Particle Therapy Masterclass and Particle Physics Masterclasses
- Discover the Particle Physics Tapas by IPPOG
- International Cosmic Day 2024
- World Wide Data Day (WWDD) 2024 Set for November 14
- IPPOG at ICHEP 2024
- Colors of Ostrava 2024: A Celebration of Music and Culture with IPPOG's Support
- IPPOG Annual Report 2023 Now Available
- 70th Anniversary of CERN
- Highlights from the 27th IPPOG Meeting at CIEMAT, Madrid
- Recognising the Winners of the 1st edition of the IPPOG Photo Contest



21 October, 2024

The difference between Particle Therapy Masterclass and Particle Physics Masterclasses

The **Particle Therapy Masterclasses** are part of **International Masterclass Program**.



15 October, 2024

Discover the Particle Physics Tapas by IPPOG

The world of particle physics can seem complex sometimes... but we have created an innovative and accessible way to bring this fascinating field closer to everyone: the **Particle Physics Tapas**. Much like the small, delicious Spanish dishes they are named after, these Tapas are tiny introductions to key concepts in particle physics.



18 September, 2024

International Cosmic Day 2024

Exciting News! Get ready for the cosmic celebration of the 13th International Cosmic Day on November 26, 2024!



12 September, 2024

World Wide Data Day (WWDD) 2024 Set for November 14

On November 14, 2024, students from around the globe will participate in the LHC World Wide Data Day (WWDD), a **24-hour event that offers high school students a unique opportunity to analyse data from the Large Hadron Collider (LHC)**.



05 September, 2024

Applying #BackToSchool to Global Science Outreach: Can It Work?

Once, someone asked our social media manager if the hashtag **#BackToSchool** could be applied to the world of science and related outreach. Let's start with a brief explanation of what this hashtag means, and then we'll share the response from our experts.



Representative's profile to
be completed

<https://ippog.org/form/representative-information>

Masterclasses

Hands on Particle Physics



- About IPPOG's IMC
- Take Part
- IPPOG's Physics Portfolio
- Participating Countries & bs
- Resources & Publications
- Contact & Credits

The IPPOG International Masterclasses Project

Each year over 13,000 high school students from 60 countries step out of the classroom for a day to immerse themselves in the fascinating world of Quarks and Leptons. Hosted by 225 universities and research centres, these masterclasses offer a unique chance to unravel the mysteries of matter and forces, enabling the students to perform measurements on real data from particle physics experiments themselves. At the end of each day, like in an international research collaboration, the participants join in a video conference for discussion and combination of their results. International Masterclasses aren't just events; they're a passport to discovery, an annual opportunity for 15- to 19-year-old students to ignite their curiosity in particle physics. International Masterclasses promise to make science come alive in a way that textbooks never could. Get ready to go beyond the classroom and into the forefront of scientific exploration!

Information for
High School Students

Information for
Teachers and
Educators

Information for
Institutes and
Physicists



Video by Chetna Krishna, CERN



International Masterclasses

<https://ippog.org/imc-international-masterclasses>

What's new?

- Reorganization of the menu
- New video
- Institutes update

Success Stories

- > Discover IPPOG reports and publications
- > ICHEP 2024 Conference Outreach Plenary talk is on YouTube
- > Enjoy the 2024 photo contest results
- > 8 witness stories on applications for society !

Resources

- > Particle Physics Tapas, by IPPOG working groups
- > IPPOG members & partners multilingual web sites
- > RDB, the 25th anniversary IPPOG resource database

View some of the IPPOG members projects

Home Highlights

<https://ippog.org/>



Success Stories

- > Discover IPPOG reports and publications
- > ICHEP 2024 Conference Outreach Plenary talk is on YouTube
- > Enjoy t
- > 8 with

Re:

- > Particle Physics Tapas, by IPPOG working groups
- > IPPOG members & partners multilingual web sites
- > RDB, the 25th anniversary IPPOG resource database

[View some of the IPPOG members projects](#)

Don't forget to send us your news to share on the website



Inspirational Success stories

Highlighting success to inspire and connect

Goal:

Showcase the projects of IPPOG contributors (success stories) through **periodic interviews**, inspiring new generations and **amplifying visibility**

Project Structure:

- **Format:** Regularly published interview-style articles (news on the website)
- **Key Content:**
 - Personal journey
 - Scientific achievements
 - Messages for future generations
- **Channels:** IPPOG website, newsletter, and social media

Timeline:

- **01/2025:** Planning and first article launch



Goodies

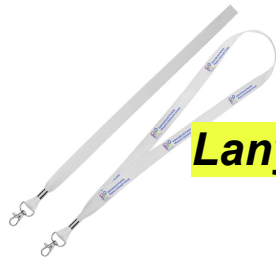


Mugs

Official logo and
new design



Pins

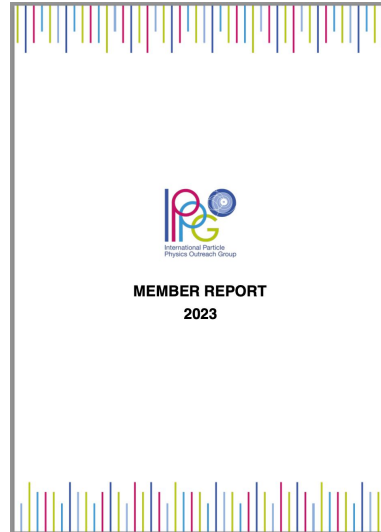
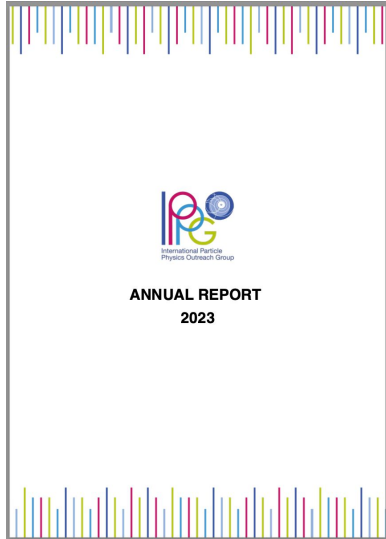


Lanyards

You are invited to stop by the IPPOG office (b. 1-1/24) to collect the gadgets you need for your activities.

Flyers are also available online and ready for printing

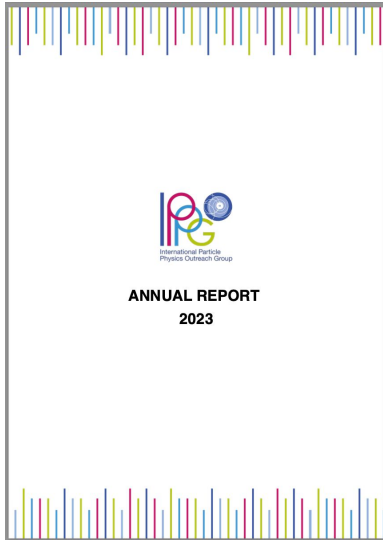
<https://cds.cern.ch/record/2903880>



34 reports received from ippog
members in 2023

Well done!
28 in 2022

Print version will be distributed to the representative during the CB meeting.
A digital version is available on **IPPOG website>publications**



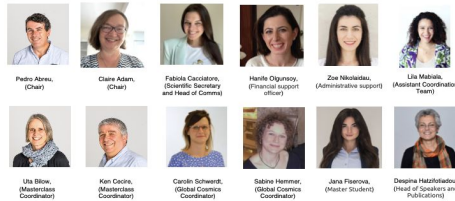
Coordination Team

Composition 2023

The IPPOG Coordination Team in 2023 comprised Pedro Abreu (LIP and IST, U. Lisbon, Portugal) and Claire Adam (LAPP, France) as elected chairs, Uta Blouw (TU Dresden, Germany) and Kenneth Cecire (U. Notre-Dame, USA) as International Masterclass Coordinators, Carolin Schwerdt (DESY) and Sabine Hemmer (INFN, Italy) as Global Cosmics Coordinators, Fabiola Cacciatori (U. Notre-Dame, USA) as Scientific Secretary and Head of Communications, Lita Mabiela (CERN) as Assistant of the Coordination Team, Hanife Olgunsoy (CERN) in the role of Financial Support, Zoe Nikolaidou (CERN) as Administrative Support, Despina Hatzifotiadou (INFN Bologna) as Head of Speakers and Publications and Jana Fiserova (CERN) as student (from October 2023 to January 2024).

The team is responsible for organising global IPPOG activities, developing infrastructure and activities in support of the collaboration, in line with the strategic vision set forth by the chairs, coordinating the International Masterclasses in particle physics programme and Global Cosmics, coordinating twice-yearly collaboration meetings in cooperation with IPPOG members and proposing and managing the core budget.

Detailed reports on these activities follow.



Collaboration meeting – Autumn

Indico URL link: <https://indico.cern.ch/e/ippog-2023-autumn>

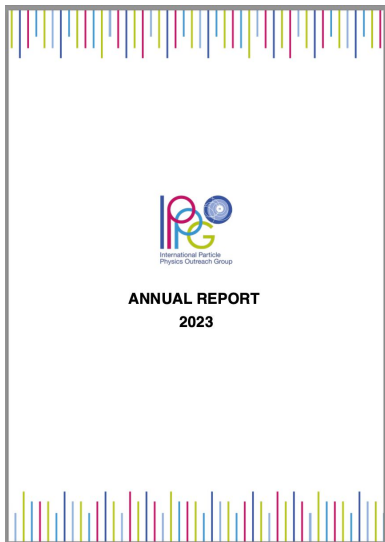


26th IPPOG autumn meeting at CERN, 28 – 29 – 30 November 2023

The 26th Collaboration Meeting was organized and hosted at CERN. Spanning from November 27 to 30, 2023, the meeting attracted a diverse assembly of 70 registered participants. The sessions were moderated by the co-Chair Pedro Abreu, while Claire Adam, gave a presentation on Communication, Outreach and Citizen Science at the 13th ICFA meeting in Hamburg.

The first days were dedicated to the meetings of various Working Groups: "Application for Society," "Masterclass to New Countries," and "Exhibits and Public Events" and the International Masterclasses Steering Group convened to address pertinent matters.

In the evening of November 28, attendees were offered the optional opportunity to join in the Movie Night featuring "Ghost Particle," a documentary by Geneva Guerin (Director of Cinécoop Productions in Canada), followed by a captivating Medixip Demonstration led by Pineopi Christodoulou (Doctoral Student at CERN).



International Masterclasses 2023

Uta Blouw and Kenneth Cecile (IMC coordinators)



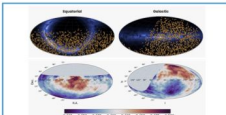
More than 300 Masterclasses during IMC23

- 211 LHC Masterclasses with CERN VC
- 40 LHC + 8 MINERVA + 2 NOVA Masterclasses with Fermilab VC + offshell VC
- 16 Belle II Masterclasses with KEK VC
- 30 Particle Therapy Masterclasses with GSI VC
- 12 Pierre Auger Masterclasses with Malargue VC

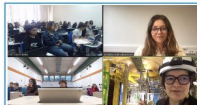


The program ran in 63 countries.
New participants came from:

- Zambia (University of Zambia, Lusaka)
- Mozambique (University Eduardo Mondlane, Maputo)



A new Masterclass with data from the Auger experiment was implemented. 550 students analyzed events and created sky maps with reconstructed arrival directions.



14 special LHC Masterclasses with 500 girls were organized on February 10 to celebrate the International Day of Women and Girls in Science.



World Wide Data Day on November 9 enabled students around the world to analyze LHC data in their schools: 27 classes studied CMS and 17 classes went for ATLAS.



Global Cosmics Group and International Cosmic Day 2023

Carolin Gneibner (DESY), Sabine Hemmer (INFN)

The Global Cosmics Group reunites groups active in outreach on subjects related to cosmic ray physics. Its members engage in projects in more than 12 countries all around the world. The group's core activity is the participation to the International Cosmic Day (ICD), organized every year by DESY with support from the Global Cosmic Group, scientists and event experts.

The 12th ICD, held on November 21, 2023, connected 2600 students, researchers, and institutions across 19 countries and 4 continents. Through joint video conferences, participants discussed and explored cosmic particles, supported by scientists and teachers. Those unable to attend in person accessed real data remotely provided by the Global Cosmic Group.

Once again, a booklet summarizing the research findings of the youth participants was compiled:

<https://syncandshare.desy.de/index.php/s/4xmEQbwCAyDyYq>.

There is a lot to discover: great pictures from all over the world, research results from zenith angle measurement to balloon flight data or the effects of smoke from Canadian wildfires. The participating groups consistently demonstrate a remarkable research spirit, delving into a diverse array of topics with enthusiasm. They dedicate significant effort to presenting their research findings with clarity and precision. Swiftly immersing themselves in the scientist's role, the young participants grasp the essence of international cooperation, fostering a deeper understanding of collaborative scientific endeavors.

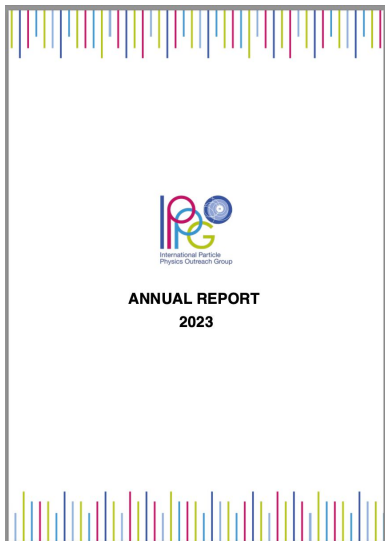
In addition to the scientific activities, the young people are also invited to take part in a drawing contest, a photo contest and a kahoot quiz. On the left is the winning artwork from the drawing contest, and on the right is the photo from the photo contest.



© Pozzi Lorenzo from Liceo Respighi



© CMU THAILAND



Speakers and Publications Committee (SPC)

Members: Despina Hatziliotiadou, Dezső Horvath, Farid Ould-Saada, Jonas Strandberg

The SPC makes a regular survey of conferences of interest for IPPOG participation, such as major conferences in particle physics and specialised conferences in physics education. Abstracts are prepared and sent to these conferences. For the abstracts accepted, speakers are identified and selected to attend the conference and present on behalf of IPPOG (in plenary, parallel, or poster sessions). The committee also checks the presentation, regarding the content and style, and finalises the proceedings and/or other publications.

In 2023 IPPOG was present at the following conferences:

EPS-HEP 2023 21-25 August 2023, Hamburg, Germany
(EPS Conference on High Energy Physics) <https://www.eps-hep2023.eu>
"The International Particle Physics Outreach Group"
presented by Claire Adam Bourdarios

TAUP2023 22 August-1st September 2023, Vienna, Austria
(International Conference on Topics in Astroparticle and Underground Physics)
<https://indico.cern.ch/event/1199289/>
"International Masterclasses – from collider physics to neutrinos and cosmic rays"
presented by Ivan Melo

ACP2023 25-30 September 2023, George, South Africa
(African Conference on Fundamental and Applied Physics)
<https://indico.cern.ch/event/1129551/>
"Engaging Teachers for Informal Education in Modern Physics"
presented by Pedro Abreu

ACHEP2023 23-27 October 2023, Casablanca, Morocco
(The First Edition of the African Conference on High Energy Physics)
<https://fs.uft.ac.ma/achep/>

"The International Particle Physics Outreach Group: A pillar of particle physics outreachers"
presented by Claire Adam Bourdarios

Conferences on Education in 2023:

GIREP*-EPEC 2023 3-7 July 2023, Košice, Slovakia
(World Conference on Physics Education) <https://indico.cern.ch/event/1162406/>
"The IPPOG Resource Database: Making particle physics outreach & education available worldwide"
presented by Barbora Bruant Gulejova

*GIREP : Groupe Internationale de Recherche sur l'Enseignement de la Physique



IPPOG Digest

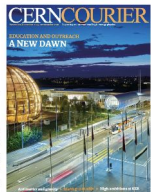
NOVA: A new "Nu" Masterclass

On March 11, 2023, the University of Minnesota hosted a NOVA masterclass with local high school students and teachers, led by Professor Greg Pawloski, QuarkNet staff, and educator Mike Plucinski. The measurement explores neutrino oscillations between NOVA detectors, differing from MINERvA's focus on neutrino interactions with nuclei. Participants use Python notebooks for data analysis, adding a coding dimension. Successful pilots occurred at the University of California, Irvine, and the Sanford Underground Research Facility in South Dakota. Workshops at Fermilab refined the protocol, with feedback integrating into the IMC 2024 offerings for NOVA measurement.



CERN Courier : A New Dawn

In the context of the CERN Science Gateway's opening (October 2023), the November edition of the CERN Courier was dedicated to outreach activities. In this issue, IPPOG co-chair Claire Adam discussed the increasing importance of communication and education in scientific conferences, with many now incorporating dedicated outreach sessions. Hands-on activities and programmes (such as the International Masterclasses) have gained popularity and are now being extended to global time zones and online platforms. Virtual visits to LHC experiments and community-driven events like Dark Matter Day aim to enhance scientific understanding among a wide audience. Contributions from a number of CERN colleagues highlights recent progress and debate in the evolving landscape of outreach in particle physics.



Particle Therapy Masterclass for teachers and Music Festival in Sofia, Bulgaria



During the 25th IPPOG spring meeting in Sofia, in addition to the regular biennial community meeting of IPPOG, various notable public events took place. These included a CMS masterclass for students

and a Particle Therapy Masterclass for Teachers. Throughout these days, students participated in a school contest (video and art works) and they were awarded by the Bulgarian colleagues and IPPOG chairs.

A science festival featured in the Sofia Tech Park) with the "Music of Physics" events led by the former chair Steven Goldfarb



Annual Report (MEMBERS)



Member Reports

Below is the list of available reports divided by years. Please note that some members do not have reports to display for 2023, which is why they have chosen to include reports from the previous two years. You will find reports from 2022 and 2010 as well as an illustration of the type of activities carried out in the countries.

2023

ALICE COLLABORATION
ATLAS COLLABORATION
AUSTRALIA
BRAZIL
BULGARIA
CERN
CZECH REPUBLIC
FINLAND
FRANCE
GEORGIA
GERMANY
GREECE
GTI
HAWC
HUNGARY
INDIA
ITALY
LHCb COLLABORATION
MONTENEGRO
NORWAY
PIERRE AUGER OBSERVATORY
POLAND
PORTUGAL

ROMANIA
SLOVAK REPUBLIC
SLOVENIA
SOUTH AFRICA
SPAIN
SWITZERLAND
USA

2022

AUSTRIA
BELLE II EXPERIMENT
CMS COLLABORATION
DESY



ALICE Collaboration 2023

ALICE Collaboration Representative in IPPOG – Despina Hatzifotiadou



Visits to the ALICE exhibition have been taking place all year round; visits to the underground installations were done when there were no beams. Among the visitors there were many artists from the arts@CERN programme.



During International Masterclasses 2023, 33 sessions of ALICE masterclasses took place; these included 3 sessions of special masterclasses for girls on the International Day of Women and Girls in Science (11th February). ALICE contributed also to the National High-School Teachers programmes at CERN with masterclasses for the Swedish teachers and the Greek teachers.

ALICE members organised a week-long internship at CERN in July for 15 students from Liceo Gardini, Lodi, Italy and a three-week-long internship at CERN for 15 students from Liceo Pacinotti, Cagliari, Italy.

Members from ALICE, ATLAS, CMS and LHCb took part in a "Live" from the CERN Control Centre after the end of the heavy-ion run and answered questions from the public.



An ALICE-themed escape room was created at the University of Jyväskylä in Finland and was visited by high-school students.



Australia - 2023

Australia Representative in IPPOG – Jackie Bondell

In 2023, Australia's activities aligned with IPPOG goals revolved around four areas:

- 1. Student Engagement:** Delivery of school partnership programs schools in regional and rural locales.
- 2. Teacher Programs:** Leading of workshops about particle physics at national education conferences.
- 3. Public Outreach:** Major public events such as the National QDM Road Trip, the Exmouth Eclipse, and public talks.
- 4. IPPOG Awareness:** IPPOG updates at the Lepton-Photon Conference.

Public Outreach:
Below Right: As part of the education program for a total solar eclipse cruise in Western Australia, COMPP hosted talks on Dark Matter and Diversity in Science.
Below Left: COMPP's Renae Key gives a talk as part of the Spooktacular Space event on Halloween.



A major outreach initiative aligned with the mission of IPPOG is the **National Quantum and Dark Matter Road Trip** as part of Australia's National Science Week. The 2023 road trip visited 18 schools and delivering 12 public events across remote and regional Australia. By the end of the event, road trippers had reached more than 1,600 people at schools, universities, pubs and community hubs across the country.

Education Programs:
Bottom Left: Uni Melbourne's Han Ng leads a lesson on Dark Matter for students at the regional Stawell Secondary School in Victoria.

Bottom Right: Students and teachers learn using CERN Mystery Boxes as part of a STEM workshop in Queensland).

Right: Article published in the SA Teachers Association Journal About Dark Matter Lessons



Centre of Excellence for Dark Matter Particle Physics (COMPP), based at the University of Melbourne, supports IPPOG in Australia.



International Particle
Physics Outreach Group

MEMBER REPORT

2023

Annual Report

2024

Starting from January (until April 2025) you have the time to prepare and send us the new annual report 2024.

Link to the folder will be shared to the Representative in January 2025.



thanks

