



IPPOG

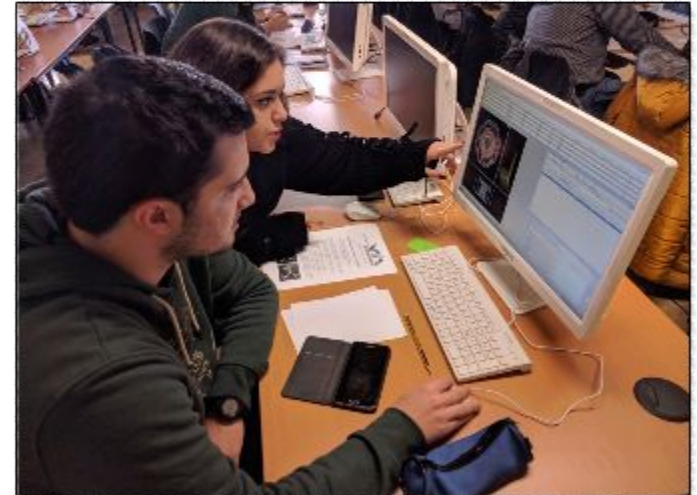
International Particle Physics Outreach Group

10. 9. 2026
Ivan Melo, Vojtěch Pleskot

In IPPOG we aim to:

- spark interest and enthusiasm among young people
- foster public appreciation for fundamental physics

The Education, Outreach & Communication we do **today** lay the foundation for **tomorrow's** support and secure the **next generation** of scientists.



IPPOG - a network of scientists, science educators and communication specialists active in particle physics outreach



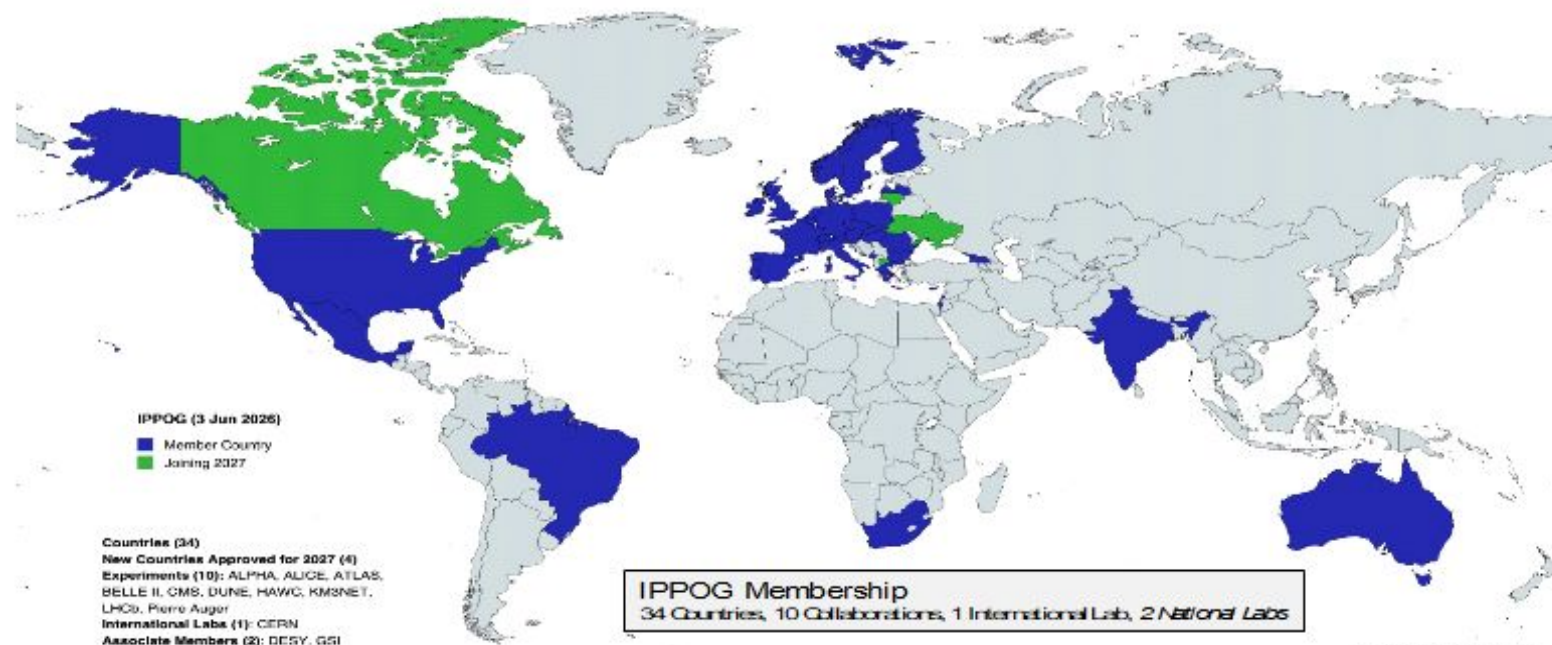
<https://ippog.org>

Global network (International Scientific Collaboration since 2016):

Members: 45 members: 34 countries, 10 experiments and CERN

Associate members: DESY, GSI

National networks: (IPPOG-SK, IPPOG-CZ,...)



Collaboration Forum meetings (spring & autumn)

Forum comprises the CB, Coordination Team and **other experts** in IPPOG activities



1st meeting in Košice in 2011



31st meeting, Ljubljana, June 2026

What we do to achieve our goals

1. Organization of **global activities** (Masterclasses, World Wide Data Day, Global Cosmics,...)
2. Support of **local activities** (Exhibitions, music/cultural festivals, competitions ...)
3. Resources **Database** for outreach material in particle physics
4. **Working groups**



- Explaining Particle Physics to a lay audience
- Outreach of Applications for Society
- Exhibits and Exhibitions
- Bringing Masterclasses to New Countries
- Diversity, Inclusion and Accessibility

International Masterclasses

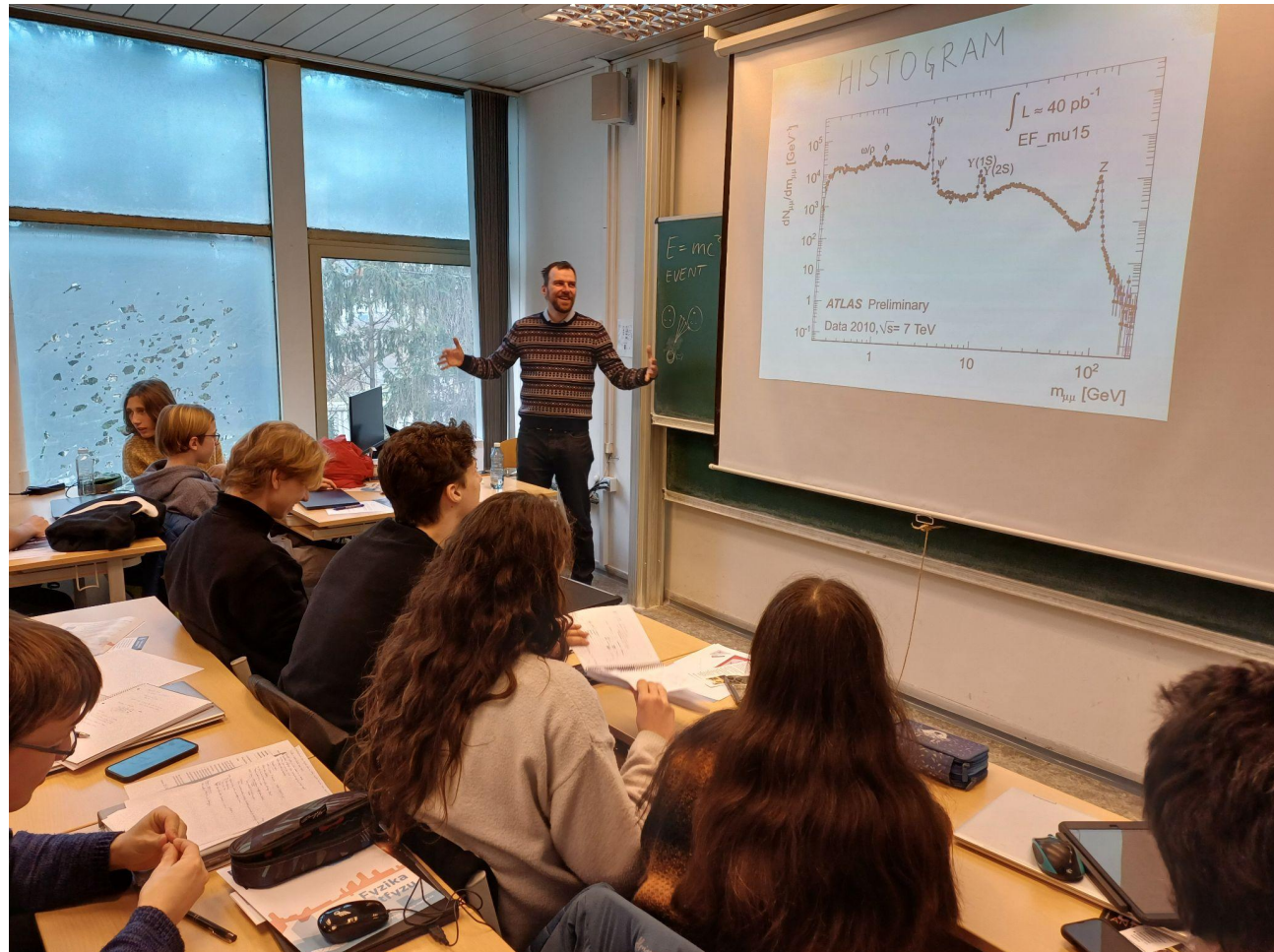
hands on particle physics

International Masterclasses

- IPPOG's flagship project
- 20 years-long tradition
- Series of one-day events for high-school students
- Every year in Spring:
 - 15 000 students
 - 60 countries
 - 225 universities
- Experiments:
 - ATLAS, ALICE, AUGER, Belle II, CMS, LHCb, Particle Therapy, MINERvA, NovA



Lecture



Own students' work



Videoconference



Masterclasses in Slovakia

International Particle Physics Masterclasses at 6 universities:

Bratislava, Nitra, Žilina, Banská Bystrica, Košice, Prešov

Regional Masterclasses (at high school)

International Masterclasses on International Day of Women and Girls in Science, UPJŠ Košice

400 + high school students annually



Masterclasses in Czechia

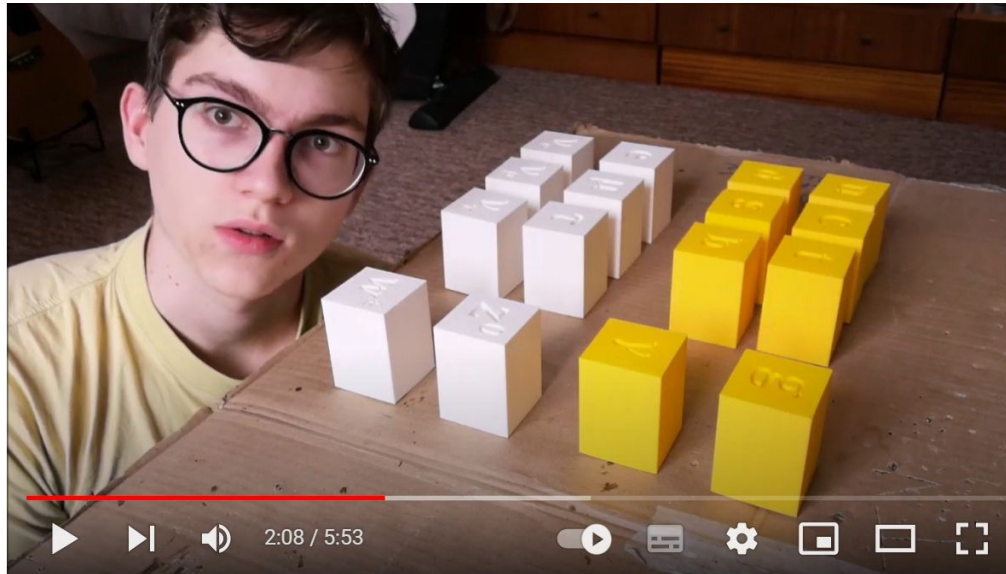
Masterclasses in Czechia

- In 2026:
 - 11 events organized
 - 5 institutions involved
 - 5 experiments presented
- Reach: hundreds of students (~300)

Cascade (SK)

Cascade Physics Video Competition for high school students

A follow-up to Masterclasses, 7 min videos on physics topics, 10-20 participants annually



BeInspired@ICHEP (CZ)

BeInspired@ICHEP



BeInspired@ICHEP



BeInspired@ICHEP





Částice a Arnošt Lustig v KCP



17. 7. – 24. 7. 2024

INTERNATIONAL TOURING EXHIBITION

BACK IN PRAGUE FROM PLANETARIA AND OBSERVATORIES IN BRUSSELS, PRAGUE AND BRNO
this year exceptionally with

PARTICLES WITH ARNOŠT LUSTIG

IN PRAGUE CONGRESS CENTER, 5. května 1640/65, 140 21 Prague 4

MEZINÁRODNÍ PUTOVNÍ VÝSTAVA

Z HVĚZDÁREN A PLANETARIÍ V BRUSELU, PRAZE A BRNĚ

letos mimořádně s projektem

ČÁSTICE A ARNOŠT LUSTIG

V KONGRESOVÉM CENTRU PRAHA, 5. května 1640/65, 140 21 Praha 4



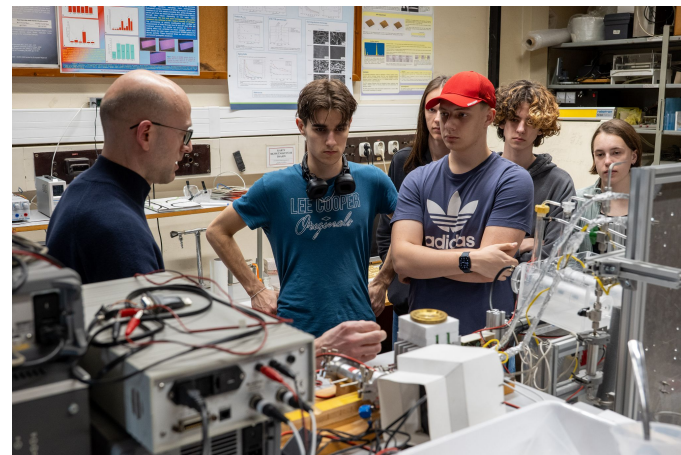
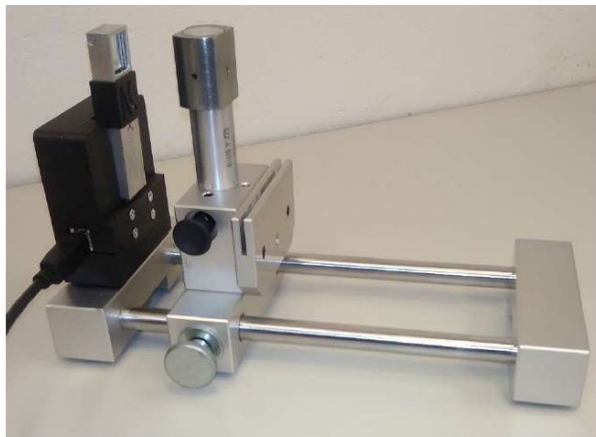
TIMEPIX@school (SK)

Timepix@school initiative supported through the CERN & Society Foundation

Boosts the role of **high school teachers**

We (IPPOG-SK) established a network of 24 high schools interested in Timepix particle detectors

and submitted a proposal to the international TIMEPIX@school project.



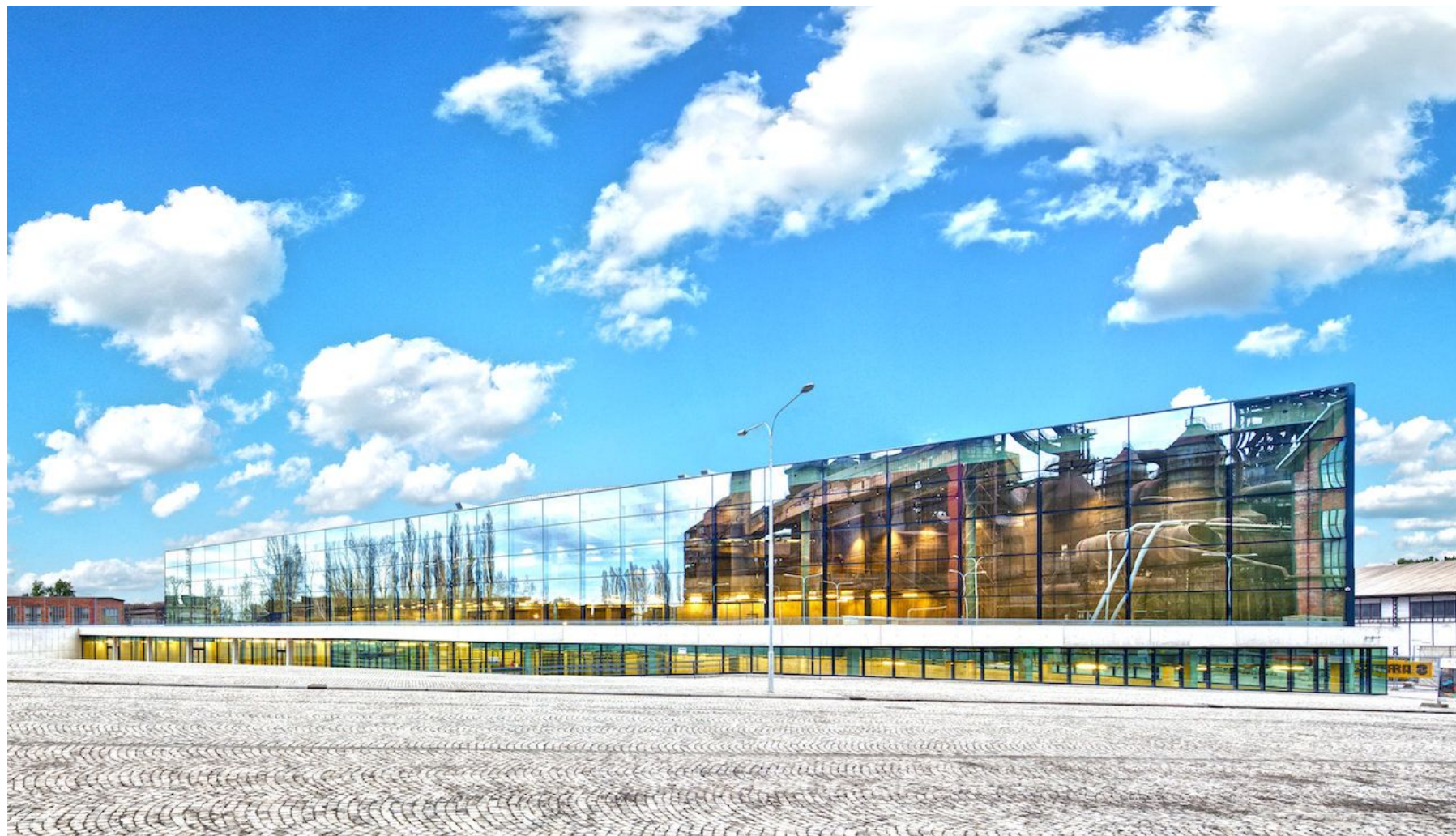
The Big Bang Stage (CZ)

at the Colours of Ostrava music festival

In the Dolní Vítkovice ancient industrial areal







The Big Bang Stage

- 28 hours of programme
- 4 days
- 3000 visitors



High profile speakers







Physics Pavillion (SK)

at the Pohoda music festival

Programme in the Magical science tent

Friday 9:00 – 13:30 &
Saturday 9:00 -13:30

Total audience: ~ 5 000 people
~ 400 /lecture

Friday at 18:00
live video from NASA Jet
Propulsion Laboratory,
Pasadena



Mix of lectures & workshops

Friday Jul 12, 9:00 – 13:30

- Simple experiments
- Why and how we wake up
- Cloud chamber workshop
- What have CERN and the LHC ever done for you
- What is space made of?
- The physics of beer workshop

Saturday Jul 13, 9:00 -13:30

- Cloud chamber workshop
- What's the matter with antimatter?
- Beating hearts of galaxies
- Mad science (simple experiments)
- Neural networks which paint like Picasso
- Smells, pheromones and passion





Simple experiments

Workshops

Beer workshop



Conclusion

Join IPPOG (Slovakia - CZ - forum)!



International Particle
Physics Outreach Group