

## **International Particle Physics Outreach Group**

## **Update on the IPPOG activities**

Roumyana Hadjiiska, Bulgarian Academy of Sciences - INRNE (On behalf of the IPPOG Collaboration)

Bulgarian teacher program CERN, July 2024



## The IPPOG Collaboration

#### International Scientific Collaboration

- Active researchers with experience in education & public engagement
- Experts in communication & education

### **Global Network**

- 41 members: 33 countries, 7 experiments, 1 intl lab (CERN)
- 2 associate members: 2 national labs (DESY, GSI)

## **Organise Global Activities**

- International Particle Physics Masterclasses
- Global Cosmics Portal
- World-Wide Data Day, International Cosmics Day

## **Support Local Activities**

- Sharing of expertise, best practices, material database
- · Resources to support public engagement, kick-start activities

### http://ippog.org Find us in the web

http://facebook.com/ippog

http://facebook.com/groups/friends.ippog

http://twitter.com/ippogOrg

http://instagram.com/ippogOrg

https://www.tiktok.com/@ippogorg

ippog-friends@cern.ch







hands on particle physics

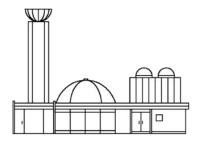












**България** е член на <u>IPPOG</u> от 2021 г.

(International Particle Physics Outreach Group)

International Masterclasses (IMC) - част от програмите, предлагани от IPPOG



## physicsmasterclasses.org

Next edition: 2025 from ~11 February to a few days before (catholic) Easter (31 March)







Information for

Information for Teachers and Educators

Information for Institutes and Physicists

Schedule
Intl. Day of Women
and Girls in Science
My Country
Physics
In the Media
Published Papers
Archive
Contributors

Contact Us

**High School Students** 



hands on particle physics



**International Masterclasses** 

19th International Masterclasses 2023

















Particle Therapy MasterClass



## **Projects for High School Students**

Astroparticle physics combines particle physics with astronomy

- Cosmic rays measurements
- Fascinating world of the exploration of the universe
- Students become familiar with scientific work using modern measurement and analysis methods

**International Cosmic Day** 

**International Muon Week** 





## IPPOG – World Wide Data Day (W2D2)

## November 2024 (24h)

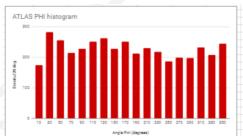
- Participating groups: 42 in 11 countries 6 from Bulgaria!
- for high school students, guided by physics teachers
- simplified measurement with data from ATLAS and CMS

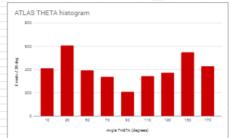




### Measurement

- Students worldwide analyse data from LHC events
- Data analysis at school, physics discussion in Video-Conference (Zoom)







https://quarknet.org/content/world-wide-data-day



# Particle Therapy Masterclasses



## Полезни връзки

Видео - как се анализират данните в този урок ( 4 минути - на английски)

Таблица СІМА

<u>iSpyWebGl</u>

WZH measurement

**IPPOG** 

<u>International Masterclasses</u>

Quarknet

CERN Open Data Portal