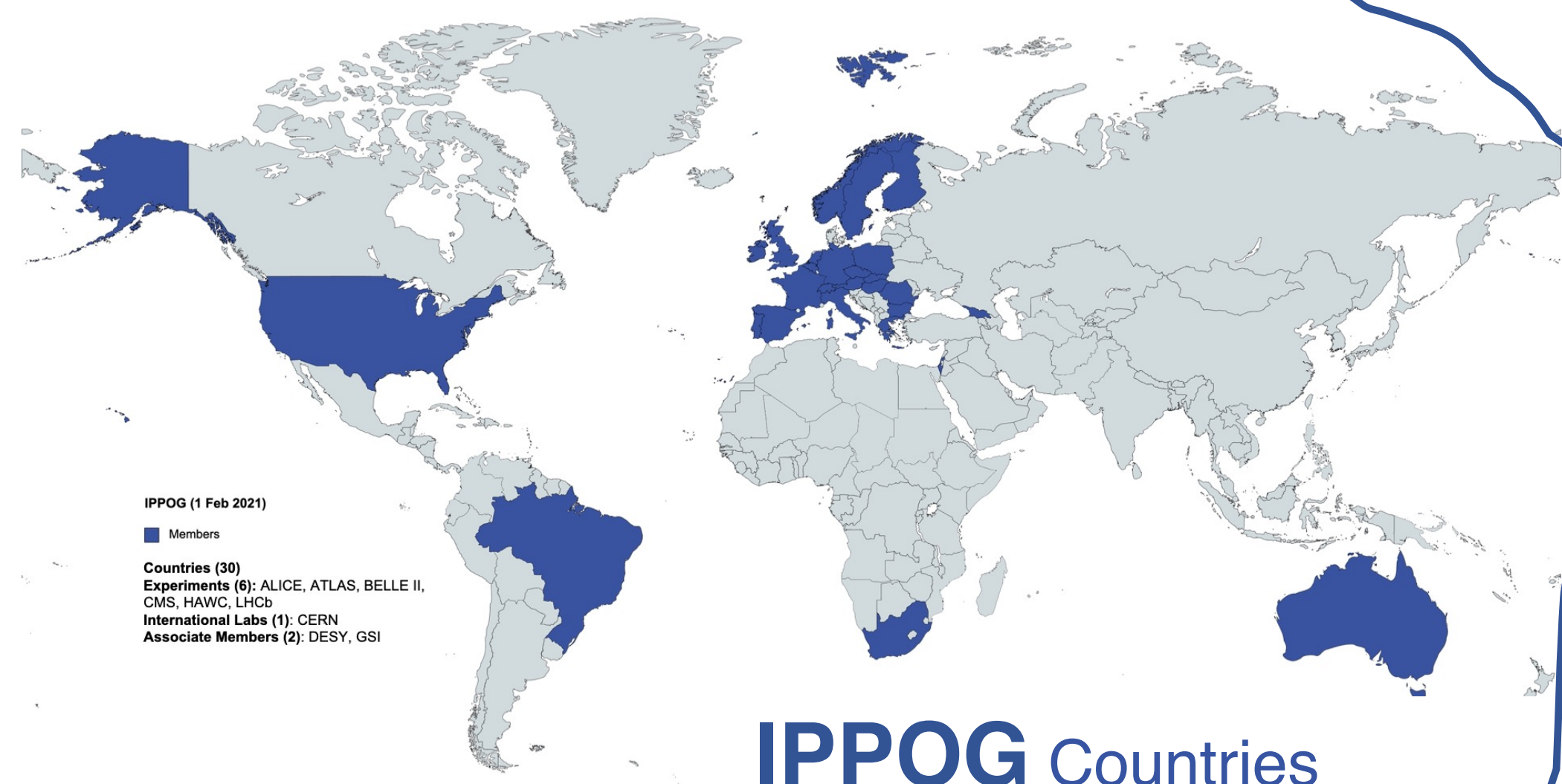


# Reaching Across the Globe with Science

**Pedro Abreu**, *LIP and IST, IPPOG Chair, on behalf of the IPPOG Collaboration*

- International Scientific Collaboration
  - Active Researchers with Experience in Education & Outreach
  - Experts in Communication & Education
- Global Network
  - 37 members: 30 countries, 6 experiments, 1 int'l lab. (CERN)
  - 2 associate members: 2 national labs. (DESY, GSI)
- Organise Global Activities
- Support Local Activities
  - Sharing of expertise, best practices, material database
  - Resources to support events, kick-start activities

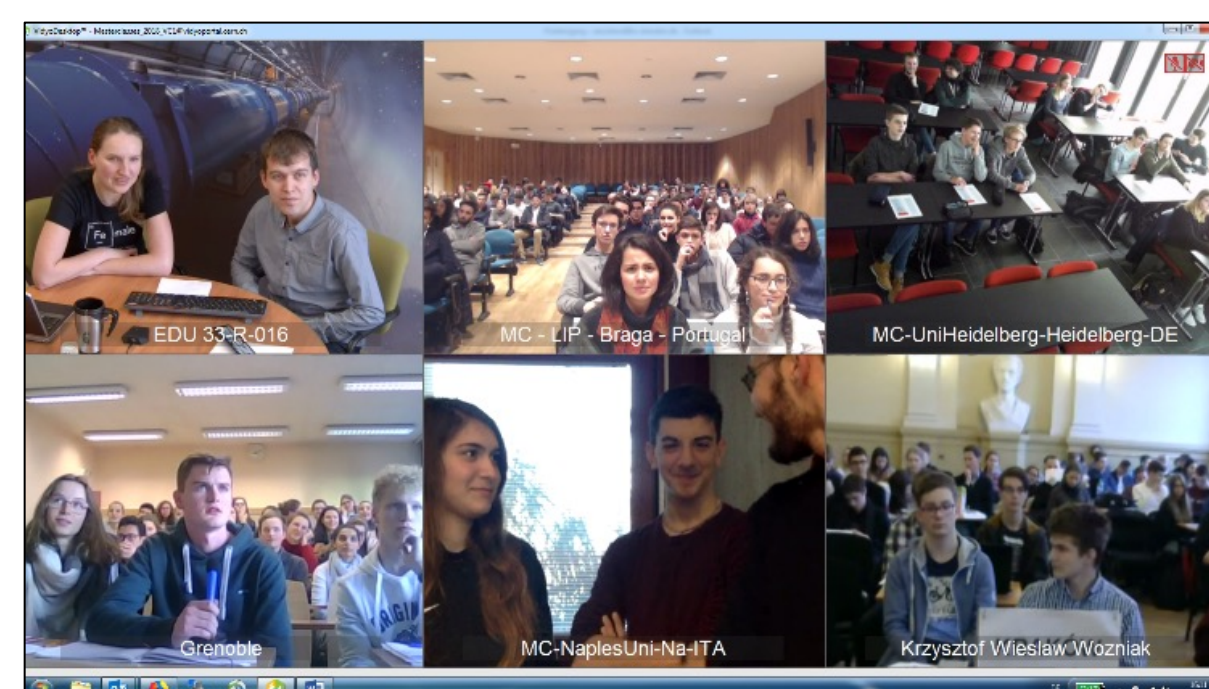


- Sustainable Development of Particle Physics Outreach
  - Discussion forums for scientists active in Outreach and Education
  - Active working groups addressing specific challenges of global Outreach
- Improving Outreach Standards Worldwide
  - Development of strategies based on current best practices
  - Long-Term links between scientists and education specialists
- Extending Global Reach
  - Expansion to countries and peoples underrepresented in particle physics
  - Usage of new methods, activities and topics to reach broader audiences

## Goals

## Activities

- International Masterclasses in Particle Physics
  - Flagship activity for high schools students (15–18 yrs. old)
  - Be a Scientist for a day...with Hands-on Particles
  - Real data from experiments, Particle Therapy, Dark Matter
- Global Cosmics
  - Global network of Cosmic Rays Projects for Schools
  - International Cosmic Day(s) and International Muon Week(s)
- ...and many other projects and activities!



every year

60 countries

220 labs

14,000 Students

Videoconf.

from CERN, FNAL, KEK, GSI, TRIUMF

## Challenges ahead

- Scale of [new] projects (timespan, cost, size, ...)
- Wide[r] recognition of the value of Science in the Society
- Increase the reach of our activities – geography, diversity, inclusion, age
- Train the trainers – Teachers, Educators, Tutors, Motivators
- Schools curricula and syllabus



## Conclusions

- **Education, Communication and Outreach** are **essential pillars** for HEPP
- Our field **needs** the support and contribution of **all of you**,
  - as **speaker/moderator/motivator/organiser/educator/tutor/supervisor/musician**,
  - as **evaluator** of projects/careers assessment/applications/positions,
  - and/or helping creating the conditions for a better Edu-Comm-OR in HEP & PP.