International Particle Physics Outreach Group

# IPPOG Resource Database Curation Group Kick-off meeting

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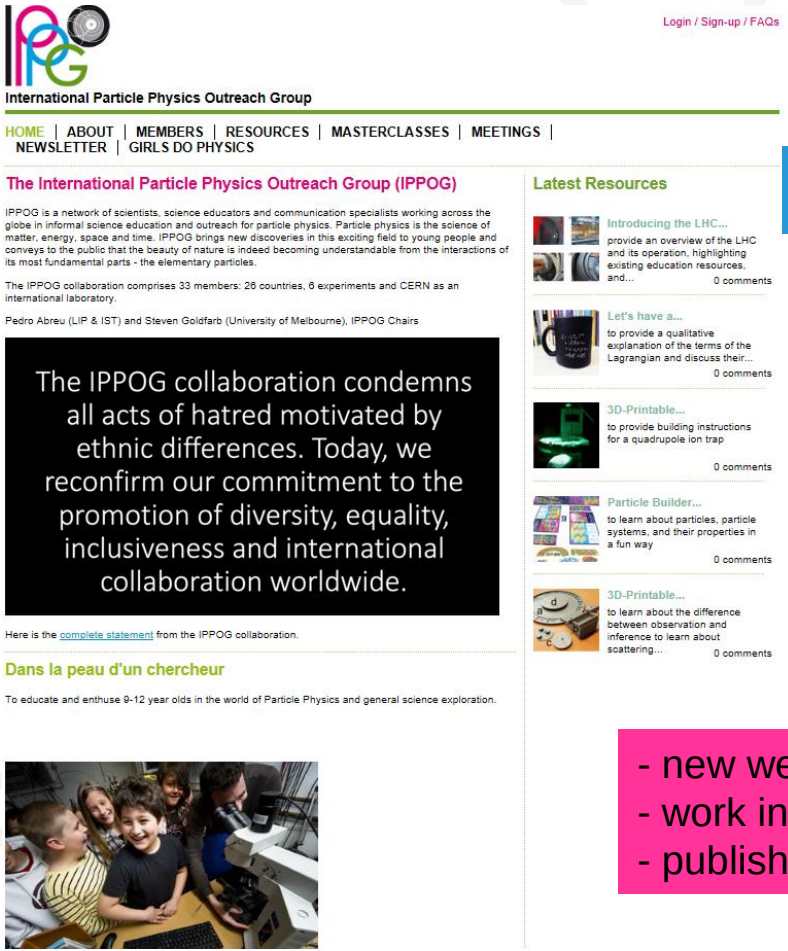
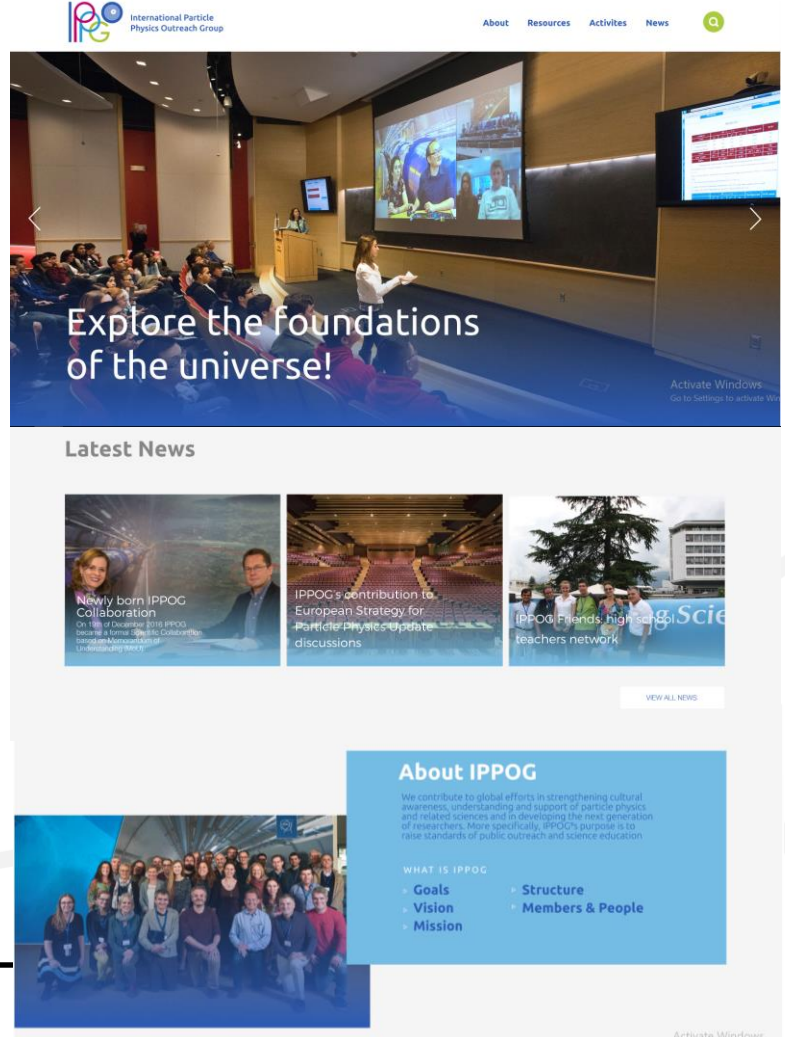
IPPOG Communication Strategy and Content Development Lead

# Outline

- IPPOG new website plans
- IPPOG Resource Database – curation
- IPPOG RDB Curation Group Members
- Curation Frame of Reference / Work Plan



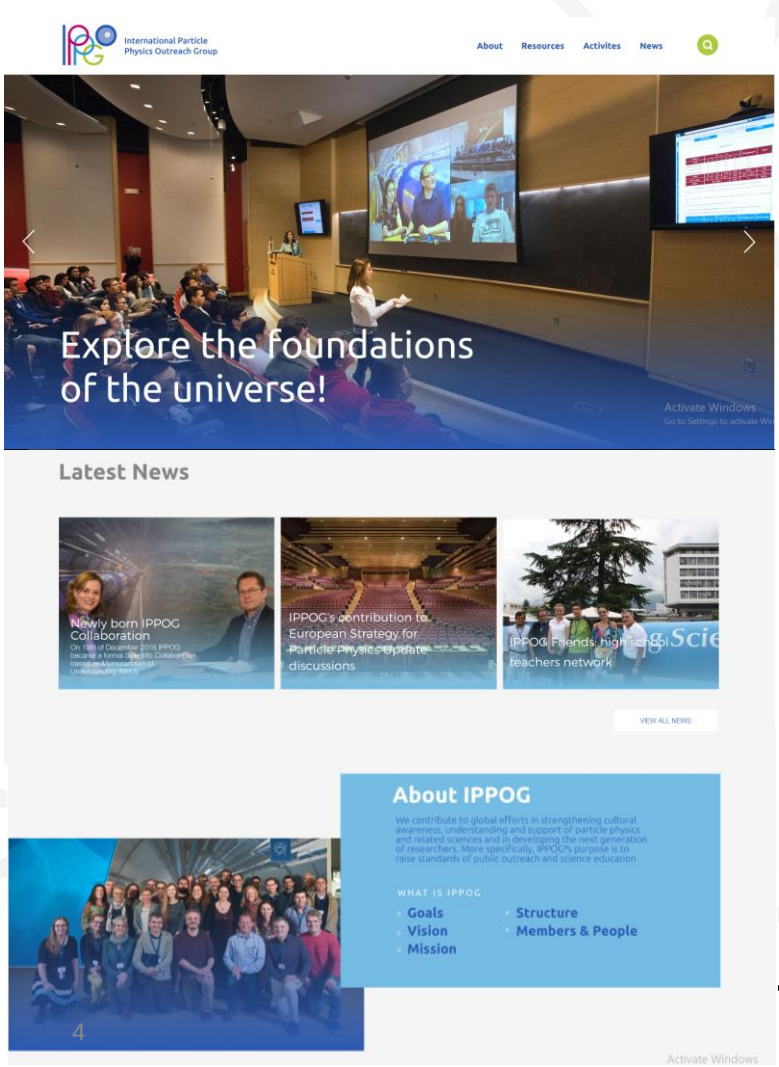

ippog.org




- new website
- work in progress
- published end 2021

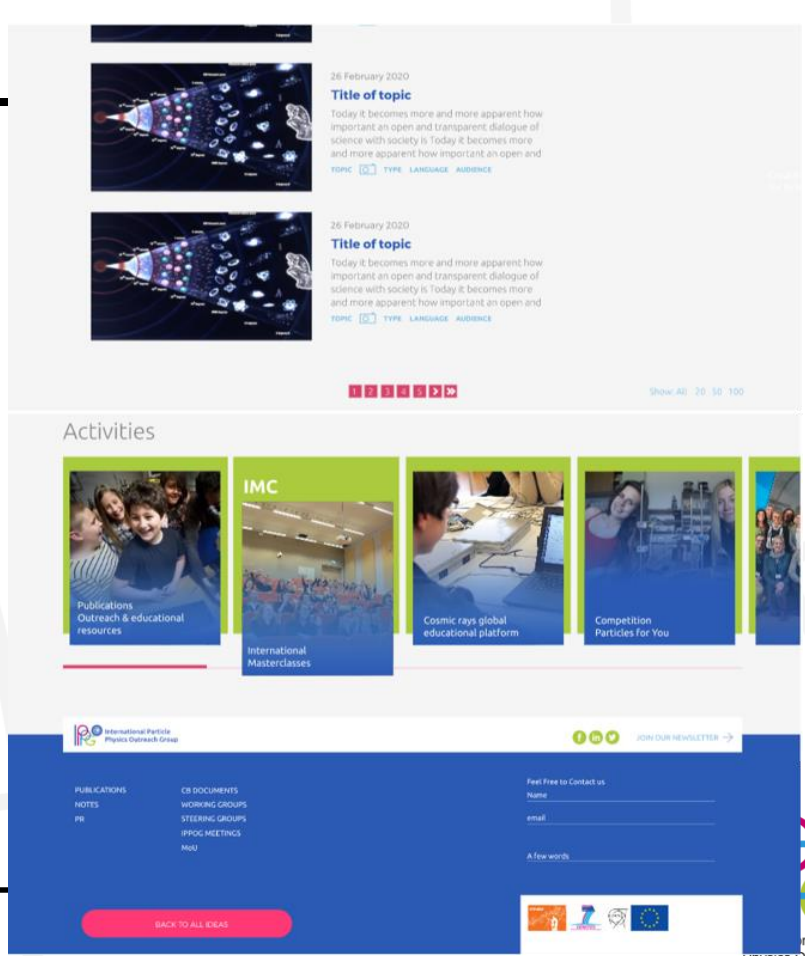
# New IPPOG website front-page design

scroll down



# Design of new IPPOG Resource Database

scroll down

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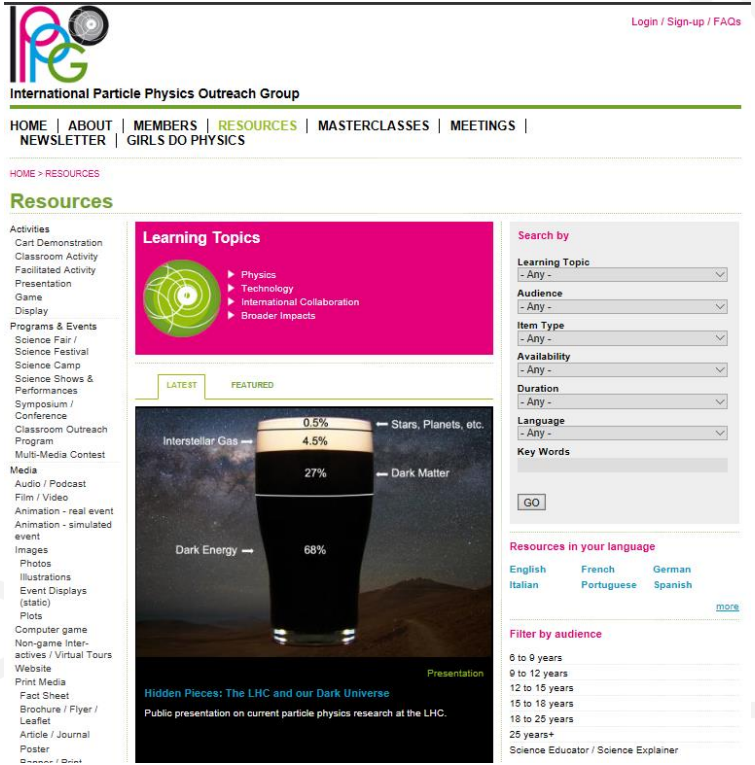
# IPPOG Resource Database (RDB)

## IPPOG RDB today




*"Collection of high quality engaging materials, e.g. videos, posters, talks, hands-on activities and more to help sharing the wonders and excitement of particle physics with teachers, students and the general public."*

http://ippog.org/resources

- New IPPOG website incl. new RDB in development
- CURATION of existing 358 resources is needed so that the revised content is ready for new RDB in 2021!
- Help needed for RDB CURATION GROUP

  > 20 knowledgable users



International Particle Physics Outreach Group

# IPPOG RDB curation group members

**24 members from around the world:**

- physics teachers
- scientists and science communicators
- 15 countries, 3 scientific experiments, CERN

Abhishek Sharma (Australia, ATLAS)
Andreas Delannoy (USA, CMS)
Carlos Cunha (Portugal)
Claire Bonnoit-Chevalier (France)
Daniela Ambar Gayoso Miranda (Chile)
Dario Menasce (INFN, CMS)
Despina Hatzifotiadou (Greece, ALICE, IPPOG)
Ivan Melo (Slovakia, IPPOG)
Jean-Christophe Pelhate (France)
Joel Klammer (China)
Julia Woithe (S'COOLAB)
Kevin Martz (USA)
Kevin Mosedale (UK)
Luís Afonso (Portugal)
Maria Niland (USA)
Marla Glover (USA)
Michael R. Fetsko (USA)
Michael Wadness (USA)
Miki Otsuka (Japan)
Moritz Springer (Germany)
Patricia Teles (Brazil, CMS)
Pierluigi Paolucci (INFN, CMS)
Robert Nickson (UK)
Soleiman Rasouli (Iran)

WELCOME!!!



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# RDB Curation Work Plan Proposal

## What is expected from the curation experts?

1) Check 1 item per week ~ 30 - 50 items during ~ 1 year

2) Evaluate the RDB items by pre-defined criteria - advise to keep them or not…

3) Add pre-defined tags to items

**Today ~ 358 resources**

From August 2020 the IPPOG Resource Database (RDB) website

**- will become temporarily static**

**- it won't be possible to submit new resources**



International Particle Physics Outreach Group

# RDB Curation Work Plan Proposal

| ITEM | Keep it? | IPPOG's best? | Topic | Subtopic | Type | Audience | Language | School topic | Online usage | Keyword |
|---|---|---|---|---|---|---|---|---|---|---|
| Pre-filled with links | Invisible on website | | | | | Tags approved by collaboration | | | | |
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|---|---|---|---|---|---|---|---|---|---|---|

Pre-filled with links

Current metadata

New metadata

| | | | OLD TAGS | | | NEW TAGS | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| # | Title | Link | Topic | Type | Language | Keep it? | IPPOG"s best | Topic | Subtopic | Type | Audience | Language | School topic | Online usage | Keyword | Evaluator(s) | Comment |
| 1 | Introducing the L | https://ippog.web | Accelerators | Article / Journal | English | | | | | | | | | | | | |
| 1 | Introducing the L | https://ippog.web | Accelerators | Article / Journal | English | | | | | | | | | | | | |
| 2 | Let's have a coffe | https://ippog.web | Standard Model | Article / Journal | English | | | | | | | | | | | | |
| 2 | Let's have a coffe | https://ippog.web | Standard Model | Article / Journal | English | | | | | | | | | | | | |
| 3 | 3D-Printable Qua | https://ippog.web | Forces, Matter / A | Cart Demonstrati | English | | | | | | | | | | | | |
| 3 | 3D-Printable Qua | https://ippog.web | Forces, Matter / A | Cart Demonstrati | English | | | | | | | | | | | | |
| 4 | Particle Builder B | https://ippog.web | Particles, Standa | Game | English | | | | | | | | | | | | |
| 4 | Particle Builder B | https://ippog.web | Particles, Standa | Game | English | | | | | | | | | | | | |
| 7 | 3D-printable Qua | https://ippog.web | Particles, Standa | Classroom Activi | English | | | | | | | | | | | | |
| 8 | Hidden Pieces: T | https://ippog.web | Physics, Cosmol | Presentation | English | | | | | | | | | | | | |
| 8 | Hidden Pieces: T | https://ippog.web | Physics, Cosmol | Presentation | English | | | | | | | | | | | | |
| 9 | Bubble chamber | https://ippog.web | Particles, Detecto | Classroom Activi | English, French, German | | | | | | | | | | | | |
| 9 | Bubble chamber | https://ippog.web | Particles, Detecto | Classroom Activi | English, French, German | | | | | | | | | | | | |
| 10 | laradioactivite.co | https://ippog.web | Physics, Technol | Website | English, French | | | | | | | | | | | | |
| 10 | laradioactivite.co | https://ippog.web | Physics, Technol | Website | English, French | | | | | | | | | | | | |
| 11 | Cosmic@Web | https://ippog.web | Particles, Detecto | Classroom Activi | English, German | | | | | | | | | | | | |
| 11 | Cosmic@Web | https://ippog.web | Particles, Detecto | Classroom Activi | English, German | | | | | | | | | | | | |
| 12 | 6th International | https://ippog.web | Physics, Cosmic | Programs & Ever | English, German | | | | | | | | | | | | |
| 12 | 6th International | https://ippog.web | Physics, Cosmic | Programs & Ever | English, German | | | | | | | | | | | | |
| 13 | Particle Physics I | https://ippog.web | Physics, Extra / M | Book | German | | | | | | | | | | | | |
| 13 | Particle Physics I | https://ippog.web | Physics, Extra / M | Book | German | | | | | | | | | | | | |
| 14 | Build Your Own F | https://ippog.web | Physics, Detecto | Activities, Classr | English, French, German | | | | | | | | | | | | |
| 14 | Build Your Own F | https://ippog.web | Physics, Detecto | Activities, Classr | English, French, German | | | | | | | | | | | | |

To be filled by you…

Google doc:
https://docs.google.com/spreadsheets/d/1pW5d63izgUl-S-CQ3IWVJAx5KmTzM95yzAg7xKZdYzE/edit?usp=sharing

You can always insert the line as evaluator 3

CONFIDENTIAL

# RDB Curation Work Plan Proposal

| ITEM | Keep it? | IPPOG's best? | Topic | Subtopic | Type | Audience | Language | School topic | Online usage | Keyword |
|---|---|---|---|---|---|---|---|---|---|---|
| Pre-filled with links | | | | | | | | | | |

Use criteria:

- ✓ Is the physics right?
- ✓ Is it a topic of interest?
- ✓ Is it related to particle physics or associated fields?
- ✓ Is it up-to-date or has it been superseded?
- ✓ Are you aware of a similar resource in the same language?
- ✓ Do you consider this resource as really outstanding?

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**IPPOG's best / «Evergreen content»**

*To be featured at the top of the search results as IPPOG's recommendation*

- Trully exceptional
- Outstanding resource
- Worthy to stand out

*Note:*
In the future IPPOG would need a permanent committee for RDB items «maintenance»

# RDB Curation Work Plan Proposal

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|---|---|---|---|---|---|---|---|---|---|---|
| Pre-filled with links | | | | | | | | | | |

New tags / categories approved by collaboration

## CURATED CATEGORIES

### TOPICS (17):

**1) MATTER, PARTICLES AND UNIVERS** (KNOWN PHYSICS)
PARTICLES
INTERACTIONS
COSMOLOGY
HIGGS
ANTIMATTER
QUARK-GLUON PLASMA
NEUTRINOS

**2) EXPLORING THE UNKNOWN** (BEYOND KNOWN PHYSICS)
SUPERSYMMETRY
DARK MATTER
DARK ENERGY
EXTRA DIMENSIONS

**3) TECHNOLOGIES and EXPERIMENTS**
ACCELERATORS
DETECTORS

**4) PARTICLE PHYSICS AND SOCIETY**
WHY FUNDAMENTAL RESEARCH
INTERNATIONAL COLLABORATION
APPLICATIONS & SPIN-OFFS
PEOPLE BEHIND THE SCIENCE

### ITEM TYPES /CATEGORIES (10):

- Photos/ Posters/ Charts
- Videos
- Animations / Simulations
- Presentations (ppt,pdf)
- Games
- Classroom materials / Tutorials / Lesson plans / Text books
- Books
- Projects / Competitios
- Exhibition items
- Souvenirs

### FILTERING / SEARCH BY (5):

1) **Topic** (see above = 17)
1) **Type / Category** (see above =9)
3) **Audience**
   - Primary school level
   - Lower secondary school level
   - Upper secondary school level
   - Broad public
   - Educators
5) **Keyword**
4) **Language**
   - Arabic
   - Catalan
   - Chinese
   - Czech
   - Danish
   - Dutch
   - English
   - Finnish
   - French
   - German
   - Greek
   - Hungarian
   - Italian
   - Japanese
   - Norwegian
   - Polish
   - Portuguese
   - Romanian
   - Russian
   - Serbian
   - Slovak
   - Slovenian
   - Spanish
   - Swedish
   - Turkish

# RDB Curation Work Plan Proposal

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| Pre-filled with links | | | | | | | | | | |

**New school topic tag** (proposed by CERN HST teachers working with IPPOG):

AIM: Help teachers to fit their curriculum!

- given that PP is not included in most of the school curricula and they all differ
- include the link to the high school physics subjects / topics, so that teachers would immediately see where the resource can be used in the classroom
- Examples: forces, interactions, momentum, electricity, magnetism…

Challenge task — Let's make a list linking HS physics topics to PP topics! (by end July)

(Perhaps Julia could lead this ☺)

# RDB Curation Work Plan Proposal

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Adaptability for online teaching

# Work already started by IPPOG Friends

HST 2017 - IPPOG DB Curation

Fail Muuda Kuva Sisesta Vorming Andmed Tööriistad Pistikprogrammid Abi Kõik muudatused on Drive'i salvestatud

timakova.katrin@gmail.com

Kommentaarid

particles, quarks, bosons interactions

| | A | B | C | D | E | F | G | |
|---|---|---|---|---|---|---|---|---|
| 1 | Item | Topic | Subtopic | Item Types | Audiences | Rating (( | Keywords | Comments |
| 65 | CERN lesson plan, Background material, units | | | | | 5 | | as above |
| 66 | Cloud chamber diy manual | Technologies and Experim | Detectors | classroom materials | educators, upper seconda | 5 | detectors, cosmic rays, particles | |
| 67 | Solving the enigma of the universe, | Matter, particles and unive | particles and interactions, c | presentation | broad public, educators, t | 4 | particles, cosmology, quarks, energy | |
| 68 | A question of survival | | | | | | | repeat link, d |
| 69 | International cosmic day 2015 | | | | | | | poster for this |
| 70 | Alice, a voyage inside the core of m | Technologies and experim | Detectors | video | broad public | 3 | detectors, alice, quark gluon plasma | |
| 71 | ALICE videos for open days 2013 | Technologies and experim | Detectors | video | broad public | 3 | | badly named |
| 72 | A new particle is discovered, a Higg | Matter, particles and unive | Higgs Boson | video | broad public, educators | 4 | higgs, boson | change name |
| 73 | The Higgs Boson | Matter, particles and unive | Higgs Boson | poster | educators | 5 | higgs, boson | |
| 74 | A salad bowl accelerator | Technologies and experim | Accelerators | project | educators | 5 | accelerator model | |
| 75 | Build a cloud chamber | | | | | | | web version c |
| 76 | The basics of the Higgs boson | Matter, particles and unive | particles and interactions | lesson plan | educators | | | needs log in |
| 77 | A la recontre des acceleratures des | particules | | | | | | cannot comm |
| 78 | Beamline for schools competition | | | | | | | 2013, out of c |
| 79 | Le mysteries des rayon cosmique | | | | | | | in french, can |
| 80 | CMS HEP tutorial | Particle physics and societ | why fundamental research | simulation | educators, upper seconda | 5 | data analysis, boson, discovery | |
| 81 | Quark poker | | | | | | | in french, can |
| 82 | Particle masses, what if they had been different | | | | | | | Dual languag |

Sheet1

Avastamine

HST 2017:
IPPOG Working Group

Soleiman and Rob are with us now!

- Good work could be used / updated… (we have new categories, tags now + 3 years passed…)
- IPPOG Friends group of enthousiastic school teachers was created

JOIN IPPOG FRIENDS!!!



International Particle Physics Outreach Group

# Your ideas?

358 items
24 curators
~ 30 per person (each cross-checked by 2 people)

ready in 30 weeks…

Optimistic deadline: March 2021 ☺

How do you want to organise yourselves?

- Do you want to sign up for 30 or more resources?
- First comes - first serves?
- Other suggestions?

Bonus task 1

# Propose new resources

- There exist many resources out there which fit to IPPOG RDB perfectly, but have not been uploaded
- We aim for new RDB to become ***as comprehensive and representative collection of PP outreach and education resources as possible***
- Please, contribute with the ideas of new materials via google doc (no more submissions to “old” RDB).

https://docs.google.com/document/d/1_k-pYFbEZ3bODIybYUtLGCIDSpEdC04_7R64ma4Utnc/edit

Bonus task 2

What are your favourite - recommended RDB resources today?

(For 15th of July)

# Exchange information with your group!

ippog-rdb-curation@cern.ch

# THANK YOU



International Particle Physics Outreach Group