



Working Group 1

**Transition from EPPOG  
to IPPOG & IPPOG  
Membership**

## **Members**

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# Today's Presentation



- Rationale & Objectives of Working Group
- How we worked together
- What we produced
- A discussion on next steps



# Rationale for WG

Need for IPPOG support materials

that communicate to ourselves and others what IPPOG is and does

Need to decide on key issues related to

support of existing members  
selection and procedures for new membership



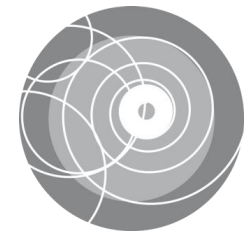
# WG Objectives

## IPPOG Identity

- To clarify what it means to be an IPPOG member
  - types of involvement in IPPOG
  - typical member activities
- To clarify who IPPOG is and what we do (in writing!)

## IPPOG Membership

- To clarify selection and prioritization process
- To clarify procedures for bringing in new members
- To produce an information packet for prospective new members



# How we worked together

- Started in May
- Used SharePoint, made e-group
- During first EVO meeting, formed 2 small working groups:
  - Designated group facilitator for each WG
  - Facilitator proposes specific targets each month
  - Held meeting with both WGs via EVO 1x mo.
  - Rotated facilitator for EVO meeting
  - Conducted member surveys, drafted documents, consulted with co-chairs



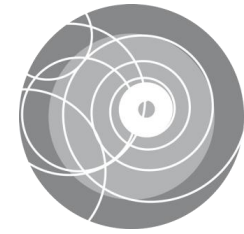
IPPOG  
Identity



IPPOG  
Membership

# IPPOG Identity

Support materials we had already



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## 1. EPPOG to IPPOG Document

### EPPOG → IPPOG: An Evolution of Particle Physics Outreach

L. McCarthy, M. Kobel, D. Barney

#### INTRODUCTION

After more than 15 years, the European Particle Physics Outreach Group is on the verge of a transformation from a “discussion forum” to a possible worldwide leader in outreach and informal scientific education activities for particle physics and related fields. This document outlines the history of EPPOG and its planned evolution over the coming years.

#### Definitions of Outreach and Informal Education

To understand EPPOG as a science outreach group that undertakes outreach and informal scientific education, the terms “outreach” and “informal education” in this context must be made clear. Outreach here refers to activities designed to raise awareness, appreciation and understanding of particle physics, its research and experiment results to a mainly non-scientific audience. It may also include educational activities that impart practical science knowledge and skills within the presenter’s field of expertise to eager minds in venues such as museums and afterschool settings. These knowledge and skill-building educational activities are strictly informal in nature due to their delivery and design. In particular, they are delivered by informal science educators (mainly the scientists themselves) rather than trained education specialists. Further, compared to formal education programs, informal education activities tend to be shorter in length, have a drop-in rather than consistent participant group, and set more modest requirements for goals and learner outcomes. Formal educational activities include rigorous program assessment and evaluation mechanisms set against accepted academic standards and research whereas informal educational activities do not. For a list of typical outreach and informal education activities versus formal education initiatives, please see the footnote below.<sup>1</sup>

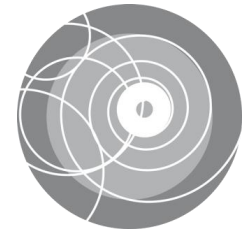
#### THE ORIGINS OF EPPOG

The European Particle Physics Outreach Group (EPPOG) is a network of scientists and informal science educators from science institutions and laboratories working in high-energy particle physics who undertake outreach and informal education initiatives. EPPOG was formed in 1997 under the joint auspices of the European Committee for Future Accelerators (ECFA) and the High Energy Particle Physics Board of the European Physical Society (EPS-HEPP) Board. As CERN’s then Director General Mr. Chris Llewellyn Smith explained in September 1997 at the first-ever EPPOG meeting, “the particle physics community has a moral obligation to inform the public on its activities. To do this well”, he

<sup>1</sup> Outreach Activities/informal education: one-day/short term courses, (e.g. EPPOG Masterclasses) site tours, lectures, classroom visits, science shows, exhibitions; Formal education initiatives: professional development programs for teachers, instructional courses and/or materials based on set standardized learning objectives, field trips associated with instructional units

# IPPOG Identity

Support materials we had already



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## 2. “IPPOG is...” Document

Who we serve

Our aim

Our vision for  
the future

What we're  
Passionate  
about

How we  
would like  
people to  
think of us

What we  
value

# IPPOG Identity

Support materials - NEW



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**NEW**

## 3. New IPPOG Brochure page 1



International Particle  
Physics Outreach Group

<http://ippog.web.cern.ch>  
<http://facebook.com/IPPOG>

**WHO ARE WE?**

We are a network of scientists, researchers, science educators and explainers engaged in informal science education and outreach for particle physics across the globe. Our membership currently includes representatives from each member state of CERN, each major experiment at CERN's Large Hadron Collider (LHC) and prominent labs and institutions in the USA and Europe. And, we have plans to include more countries and laboratories in the future.

**WHAT IS OUR AIM?**

Our aim is to contribute to global efforts in strengthening cultural awareness, understanding and support of particle physics and related sciences.

**HOW DO WE DO THIS?**

By facilitating and contributing to outreach and informal science education initiatives for particle physics across the globe; and sharing this experience and expertise with others.

**WHO DO WE SERVE?**

Anyone who wants to know more about particle physics, especially educators and students (from school to university).

**HOW CAN IPPOG HELP YOU?**

**You, the student**  
IPPOG can...

- tell you about our outreach programs in your area and how to get involved
- point you to recommended learning resources on-line

**You, the scientist**  
IPPOG can...

- share with you recommended tools and materials to effectively engage your community during talks, presentations, discussions.
- put you in touch with current outreach and science education programs near you.
- help you explore opportunities to start your own outreach initiatives via practical advice from our extensive

**You, the teacher/science explainer**  
IPPOG can...

- share with you our recommended tools and materials for your classroom audience.
- put you in touch with current outreach and science education programs near you.
- Offer you ways to get involved with science outreach through our existing programs (see reverse of this flyer)



# IPPOG Identity

Support materials - NEW



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**NEW**

## 3. New IPPOG Brochure page 2

### SAMPLE IPPOG ACTIVITIES



International Masterclasses provide an opportunity for high school students to be "scientists for a day." 16- to 18-year-old students in countries around the world are invited to one of about 120 nearby universities for a day in order to take part in an authentic research process. Lectures from active scientists give insight in topics and methods of basic research in matter and forces, enabling the students to perform measurements on real data from the LHC. At the end of each day, like in an international research collaboration, the participants join in a video conference with CERN for discussion and combination of their results. International Masterclasses offer students the chance to close their textbooks and experience modern science first-hand!



#### HOW YOU CAN GET INVOLVED

IPPOG encourages newcomers to join the International Masterclasses, either institutes willing to host a Masterclass or schools eager to participate in one. We will provide you with the information and material necessary to either organize or take part in an event that students and staff will never forget.

For more information, please see [www.physicsmasterclasses.org](http://www.physicsmasterclasses.org) or contact [masterclasses@physik.tu-dresden.de](mailto:masterclasses@physik.tu-dresden.de)



#### Outreach Database

A new IPPOG initiative, the outreach database is the first-ever global database for materials related to particle physics outreach and informal education. It houses videos, brochures, posters, talks, ideas for hands-on activities and more, in a variety of languages! Items stored here are shared by members and partners of the IPPOG network.



#### HOW YOU CAN GET INVOLVED

Although relatively new and evolving, the database already contains over 200+ entries. Besides additional content, the database needs a more user-friendly and attractive interface.

So, what can you do to help the database become a super useful tool? Browse it. Use it. Contribute content! Make concrete suggestions for improvements!

For more information, please see <http://ippog.web.cern.ch/ippog/IPPOGdatabase.html> or contact [ippog.admin@cern.ch](mailto:ippog.admin@cern.ch)

### HOW CAN YOU HELP IPPOG?

You, the student  
can...

enroll in an International Masterclass and tell your friends!

tell us about great learning tools for particle physics that you like

You, the scientist  
can...

get involved with an IPPOG International Masterclass, either at CERN or in your institute!

share suggestions for outreach tools and materials via our [Outreach Database](#).

Follow us on Facebook and share ideas

You, the teacher/science  
explainer  
can...

participate in an International Masterclass!

browse our [Outreach Database](#) and add your own items to share with others

Follow us on Facebook and share suggestions for new classroom tools and materials to be developed



Discovering Particle Physics Together

# IPPOG Identity

Support materials - NEW



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**NEW**

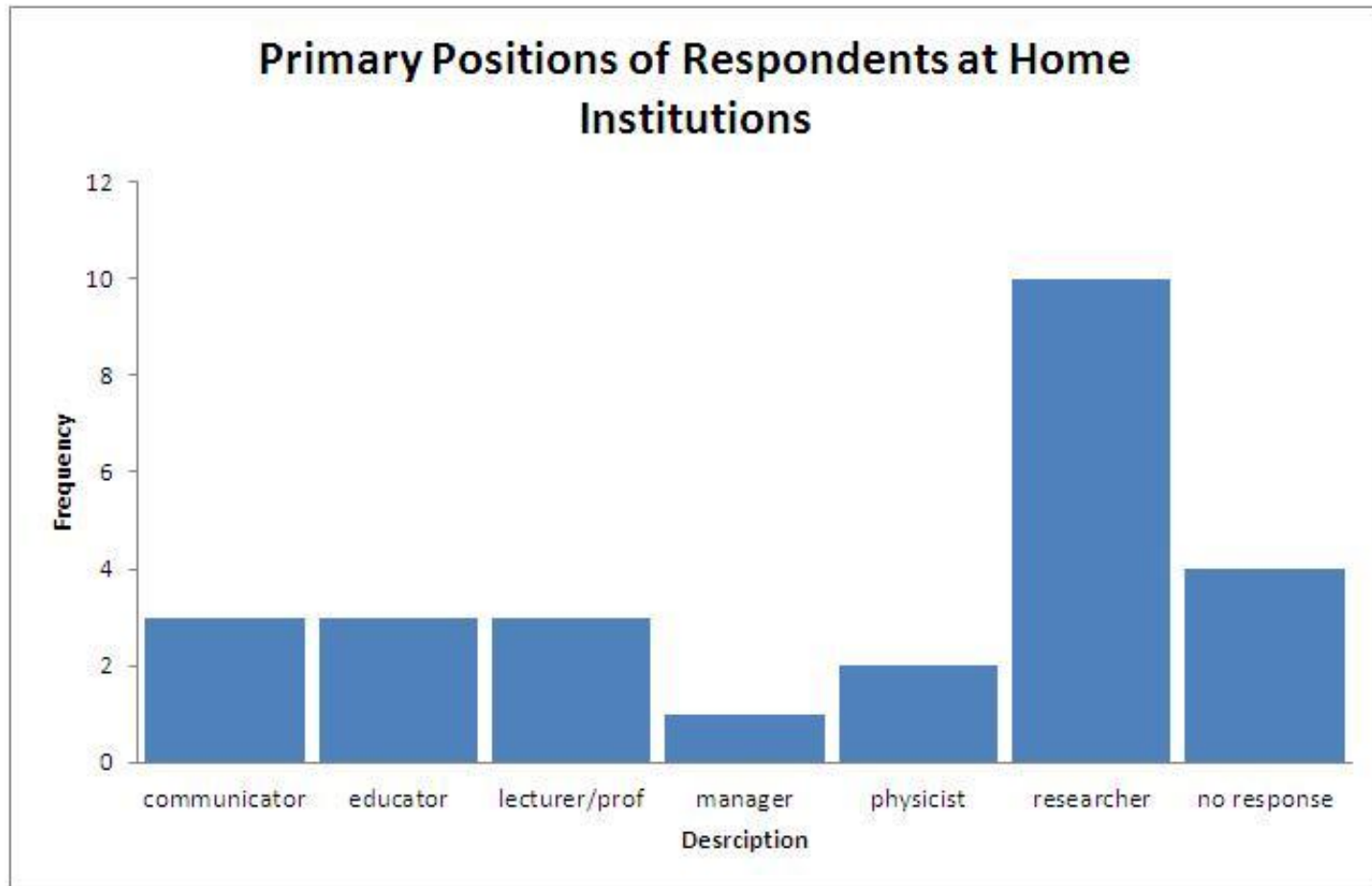
## 4. Typical Member Activities List

- We want people to view activities as enthusiasm driven, not obligation driven
- We want people to see the variety and the possibilities

CONDUCTED A SURVEY

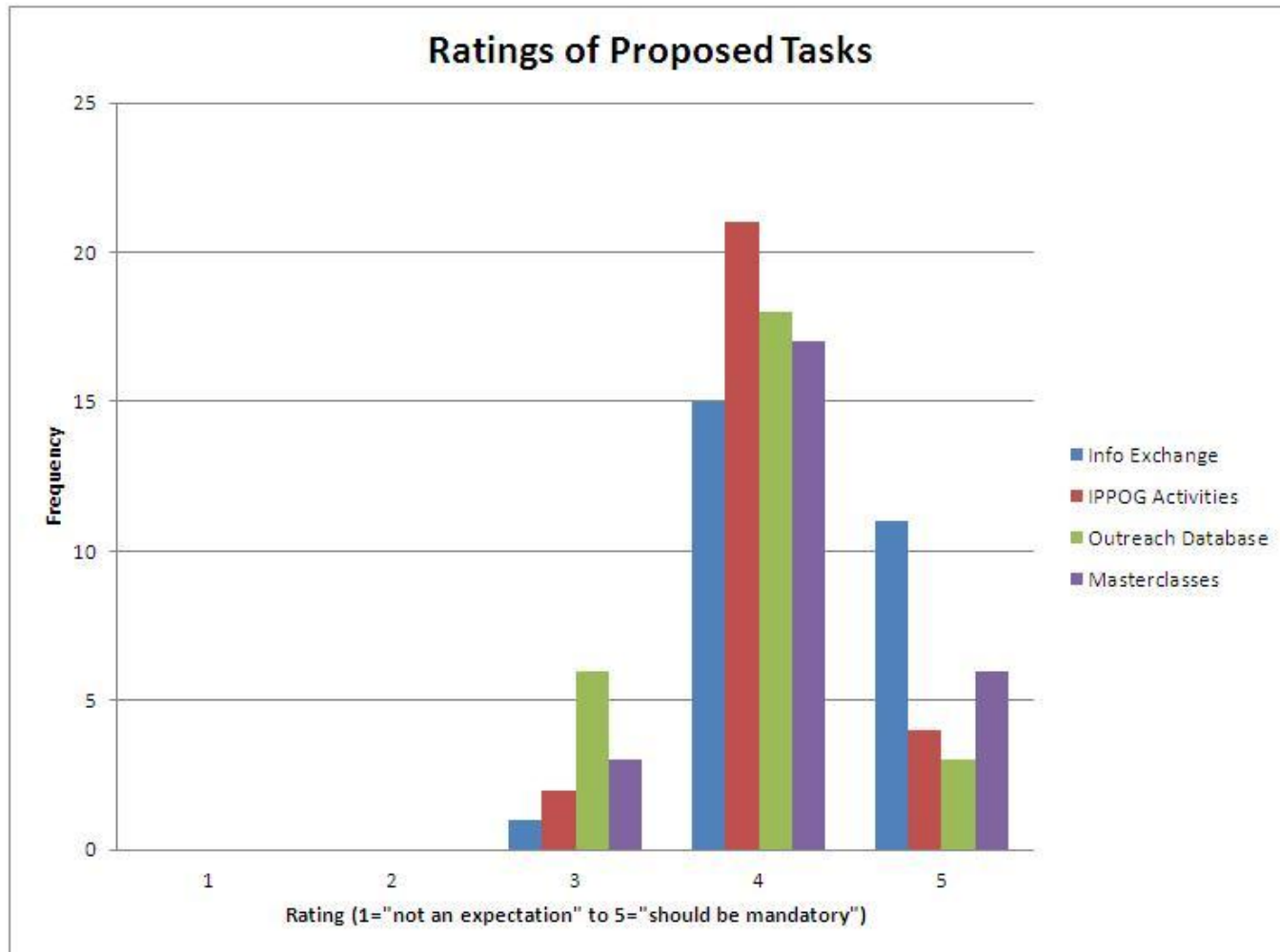


## Member Survey Results



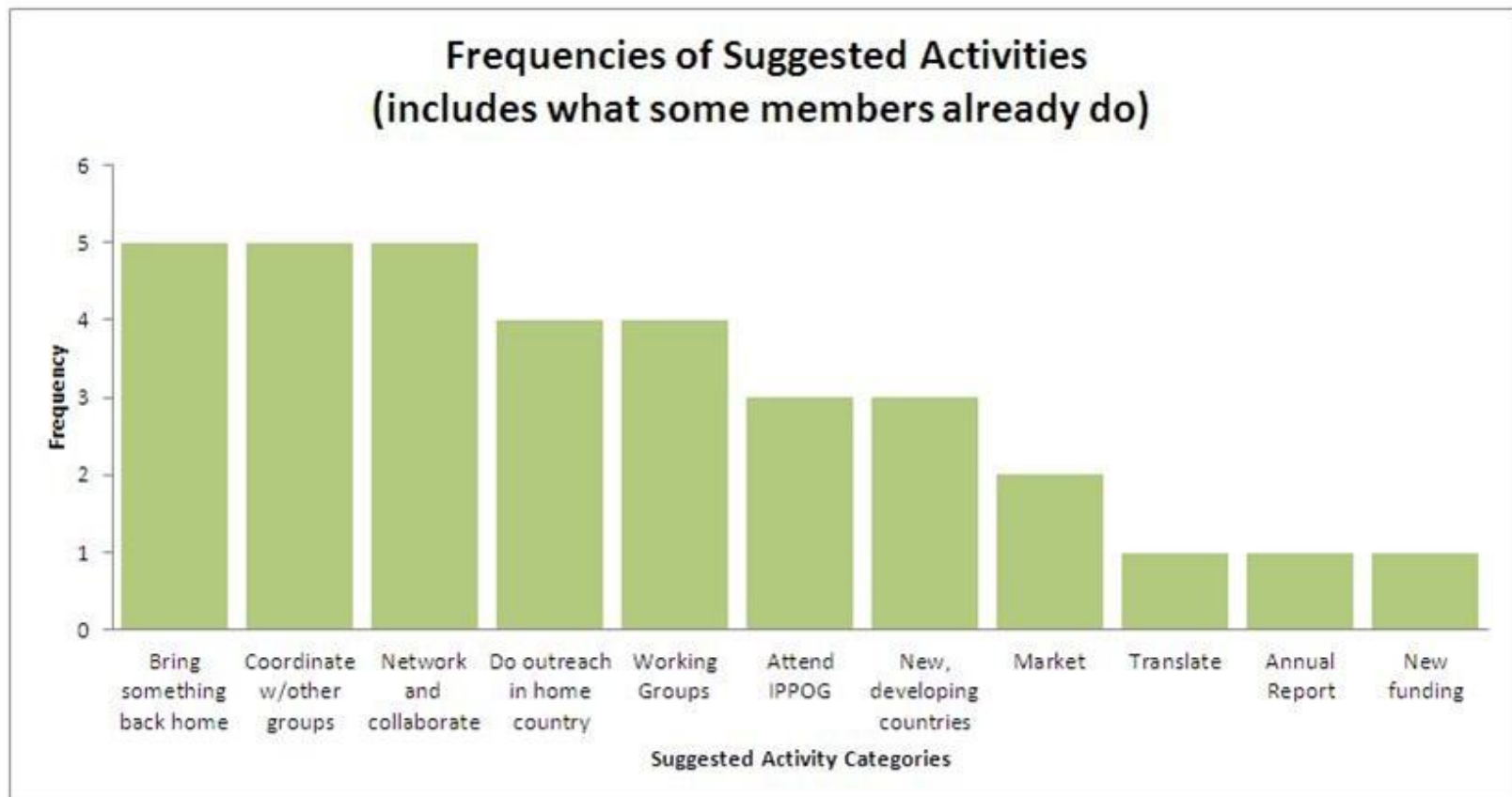


## Member Survey Results





## Member Survey Results



# IPPOG Identity Activities



Collaborate

Coordinate w/groups



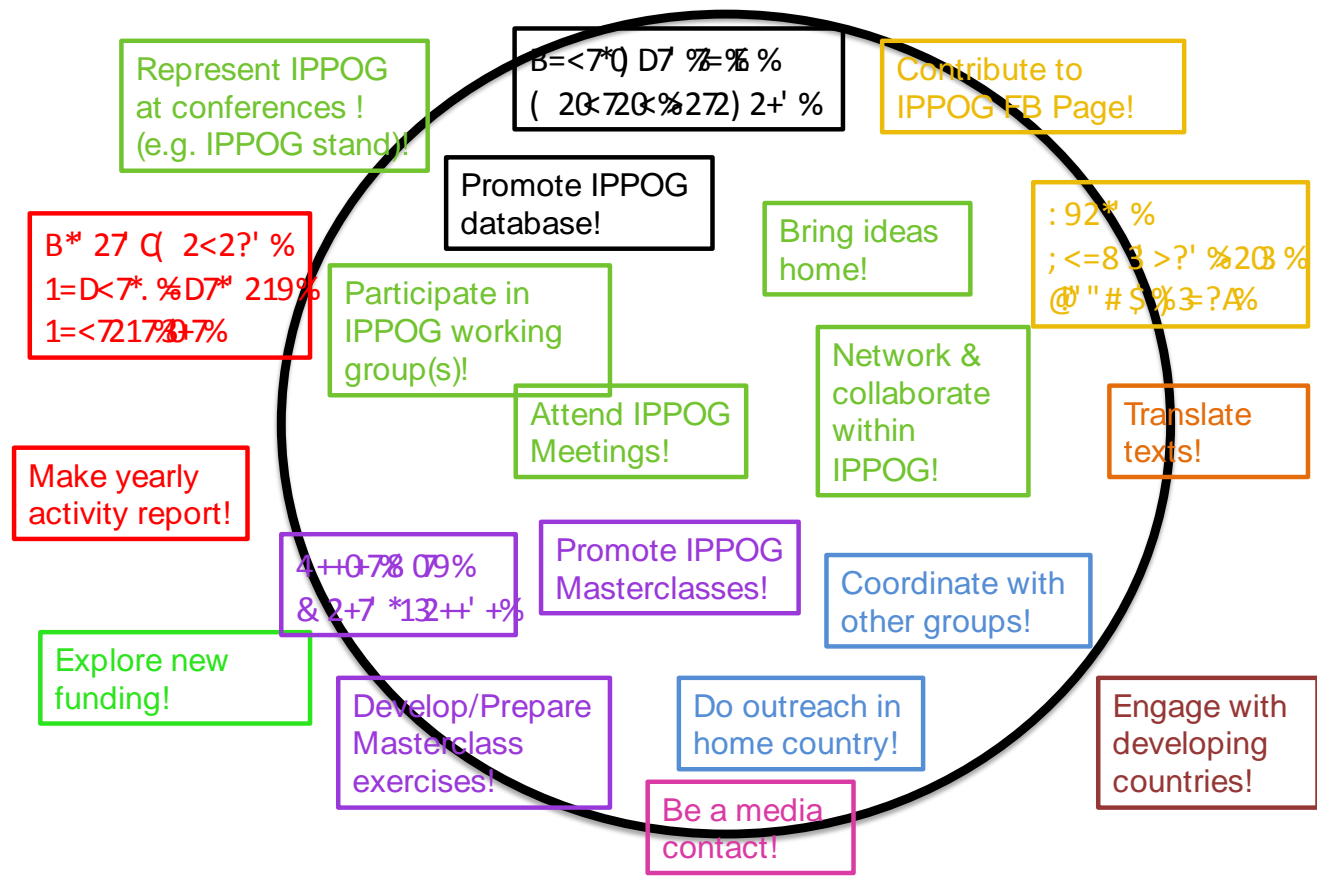
## Summary

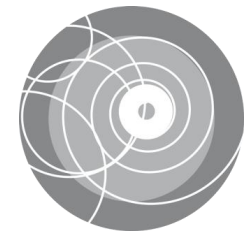
People in IPPOG are doing outreach at home, attending IPPOG meetings, exchanging ideas together, collaborating & networking together and bringing new ideas home

# IPPOG Identity Activities



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# IPPOG Membership

Currently there are two types of IPPOG participants:

- Official IPPOG Members
- IPPOG Associates

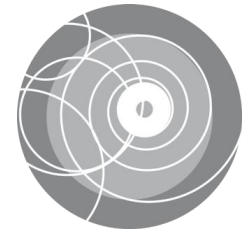
What is the difference?

IPPOG Member	IPPOG Associate
Officially delegated	Not delegated
Has voting rights	Has no voting rights
<i>Vote 1 per country/institute</i>	<i>encouraged to advise!</i>
Participation on-going	Involvement project/interest based
(duration determined by country/institute)	(duration determined by interest & availability)

**Discussion Point**



# IPPOG Membership Selection Procedures



## A Working Group Proposal

- IPPOG members share ideas for prospective members via on-line poll
- IPPOG Members vote on priorities & short list is generated
- Co-chairs prioritize shortlisted candidates and begin contacting prospective members

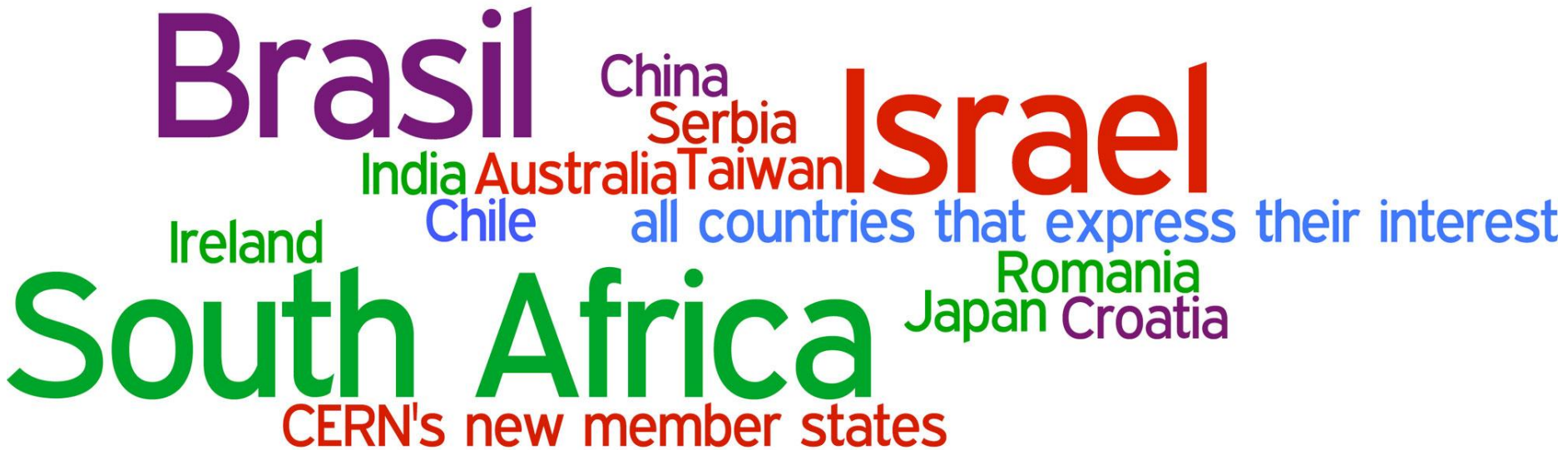
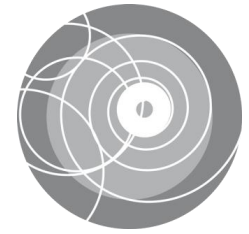
WG survey  
conducted

Invitation letter  
produced

**Discussion Point**

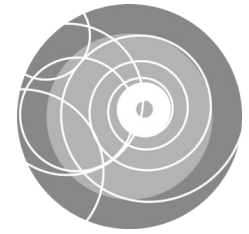
# IPPOG Membership

All suggestions for new countries



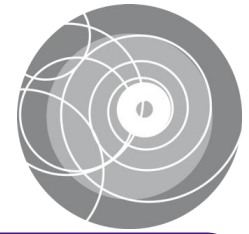
# IPPOG Membership

All suggestions for new  
labs/LHC experiments



# IPPOG Membership

## Procedures for bringing in new members



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### INVITATION PACKET 1 Version A

- Invitation Letter (tailored to specific recipient)
- IPPOG Brochure
- EPPOG to IPPOG Document
- IPPOG Contact List

### INVITATION PACKET 2 Version A

- Typical Member Activities “cloud”
- “IPPOG is...”

### INVITATION PACKET 1 Version B

- Invitation Letter (tailored to specific recipient)
- IPPOG Brochure
- “IPPOG is”

### INVITATION PACKET 2 Version B

- Typical Member Activities “cloud”
- EPPOG to IPPOG
- IPPOG Contact List

# IPPOG Membership

## Procedures for bringing in new members



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A working group proposal

### STEP 1

- IPPOG co-chairs send Invitation to prospective member country/institute addressing high-level official/representative, asking for response in writing to open dialog

### STEP 2

- if there is interest shown in possible IPPOG membership=IPPOG co-chairs follow up with country/institute to discuss further.

### STEP 3

- Co-chairs may share more information as necessary and may put prospective member in touch with IPPOG rep in country/region for more information.

# IPPOG Membership

## Procedures for bringing in new members



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A working group proposal

### STEP 4

- Prospective member representative sends formal acceptance letter in writing to IPPOG co-chairs with name of official delegate



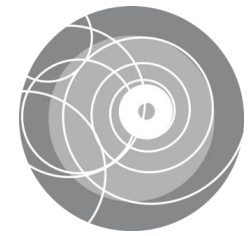
### STEP 5

- Co-chairs welcome new member delegate via e-mail and invites new delegate to next IPPOG meeting



### STEP 6

- Co-chairs follow-up as necessary (send more support documents if needed)



# Discussion Points

## IPPOG IDENTITY

- Clarification needed on what it means to be an IPPOG Member/Associate?

## IPPOG MEMBERSHIP

- Review suggestions for new members & generate short list. (Q. Do we remain LHC- centric for the time being? How many new members do we invite for now?) (slides 18 & 19)
- Any comments on invitation form letter or “IPPOG is...”: send to Lisa

# Backups







## New project ideas

1. “We should exchange ideas how to lift the level of physics education in schools. E.g. there is a scientific playground (Clare Garden of Science) at the Weizmann Institute of Science in Rehovot, Israel. It would be very nice to have a detailed writeup of the various tools there so that we could build similar playgrounds at other countries.”
2. “It would be great to develop further support for groups who participate in the Masterclasses but do not have deep connection to IPPOG or the LHC.”

# IPPOG Membership

## Top 3 suggestions for new countries



Survey results - total of 7 responses

Brasil
<ul style="list-style-type: none"><li>• join now as observer, until full member of CERN</li><li>• already has Masterclasses</li><li>• could trigger the interest of other latin- american countries with hep/nuclear physics communities</li></ul>

South Africa
<ul style="list-style-type: none"><li>• does HEP</li></ul>

Israel
<ul style="list-style-type: none"><li>• new CERN Member</li><li>• participate in International Masterclasses ?</li><li>• First contact: George Mikenberg</li></ul>

# IPPOG Membership

## Other suggestions for new members



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Survey results - suggested 1 time each:

Cern's new member states:

- **Romania** - is preparing the adhesion to CERN

Countries that participate in the masterclasses:

- **Ireland** (2012)
- **Croatia** (2012)
- **Serbia**

# IPPOG Membership

## Other suggestions for new members



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Survey results - suggested 1 time each:

Active in HEP:

- **Asia (Japan, China, Taiwan)**
- **India**
- **Latin-America e.g. Argentina, Mexico, Chile**

Host of important conference:

- **Australia** - ICHEP 2012

**all countries that express their interest!**